Intergenerational Justice and Sustainability

An Analysis of Parliamentary Speeches and the Media

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EXECUTIVE SUMMARY

Intergenerational justice is an important concept in policy decision making and in maintaining social cohesion. However, we do not know the extent to which this notion is a real concern or even whether it is present in public discourse or if it is a general societal concern. This report presents an analysis of the public discourse and is divided into three chapters, corresponding to the three sources of data analysed: plenary debates in the Portuguese Parliament between 1976 and 2018, traditional media represented by three newspapers with a wide national coverage and the Twitter social network. We strive to understand whether current decisions are taken in the light of their possible impact(s) on future generations by identifying texts (debates, articles or posts) that include terms related with Intergenerational Justice and Sustainability. We concluded that although the concepts of both Intergenerational Justice and Sustainability are seldom present, references to them have been steadily increasing and reached a peak during the recent financial crisis. These topics are mentioned mainly in the contexts of social security, debt, health, the environment and education, and the parties with parliamentary seats use them with differing frequency and in different contexts. In relation to the Twitter social network, mentions are very rare and are largely on environmental issues. This corroborates recent studies that identified natural disasters as one of the greatest concerns of the Portuguese.

1.

PARLIAMENTARY SPEECHES

This chapter describes the analysis of parliamentary speeches. The first two sections include both Intergenerational Justice (IJ) and Sustainability (SDD). Section 1.1 describes the methodology adopted, notably the classification system by topic (IJ or SDD) and sub-topic (debt, environment, health, education, social security) in which these two subjects are mentioned. Section 1.2 focuses on the temporal dimension of the references to IJ and SDD. In the subsequent sections, these analyses are examined by addressing each topic separately (IJ in 1.3 and SDD in 1.4), including when (temporal analysis), by whom (analysis of speakers) and what (analysis of the sub-topics).

1.1.
METHODOLOGY: SELECTION OF SPEECHES AND DIVISION BY TOPIC

A three-part analysis was conducted to shed light on the extent to which Intergenerational Justice (IJ) and Sustainability (SDD) are present in political speeches: 1) we extracted and analysed the transcriptions of parliamentary sessions from April 1976 to July 2018; 2) we identified all speeches delivered in plenary sessions during this period and selected those in which the speaker is unequivocally identified (between 77% and 85% depending on whether we consider the entire corpus or only the last 6 legislatures; 3) we classified all speeches that refer to IJ and SDD. We defined **speech** as the set of the entire text attributed to a speaker in each session. It should be noted that this includes both the speeches made by Members of Parliament (MPs) and Members of Government (MGs). Independent MPs and MGs were aligned with the party that elected or nominated them.

A total of 112 947 speeches were automatically analysed, 929 (0.8%) of which were classified as referring to IJ, 4330 (3.9%) to SDD and 298 (0.3%) to both. IJ speeches are all those in which the expressions "**intergenerational**" "**coming generations**" ("gerações vindouras") and "**future generations**" ("gerações futuras") are used at least once, while the SDD speeches are those in which the expressions "**sustainable**" or "**sustainability**" are used. We removed all speeches that mentioned the words "unsustainable" and "unsustainability" as they were often used with a different meaning (for example, in the expression "unsustainable position"),

representing roughly 10% of the speeches on sustainability. This classification was validated manually: we read 78 of these speeches, 73 of which (or 94%) were well-classified. We then made a semi-manual sub-classification analysis: in about 800 parliamentary speeches classified as IJ, we identified five main sub-topics: environment, health, social security (SS) education and debt. We thus classified all the parliamentary speeches in these categories based on the key words set out in Table 1.1. Whenever one of the words on the list appears in a speech, it is classified as belonging to the corresponding sub-topic. We validated this classification by randomly selecting articles that had been analysed manually and identifying three additional minor topics, corresponding to approximately 3% of the speeches (28 for IJ and 147 for SDD): the sustainability of agriculture, the security forces and three public companies, TAP, RTP and RDP, which were classified as "others". Agriculture is the most frequent of these three topics, often appearing in connection with the economy and food production. The topic of public companies could also be expanded to include all such companies rather than just these three, i.e. the most mentioned in the context of sustainability and IJ. As can be seen from Table 1.1, the list of items for classification by sub-topic is short, but this not only allows us to reduce the number of incorrect classifications but also to avoid the over-representation of sub-topics given that some have more identifying words (synonyms, etc) than others. This seems to have been a reasonable decision as we were able to classify 85% of the speeches classified as IJ or SDD within these sub-topics.

The remaining unclassified speeches that we were able to read are cases in which the word sustainability is used to qualify other words and not associated to the topic per se (for example, when they speak of a specific policy being sustainable or not, that is, whether or not it can be maintained in the long term). Table 1.2 shows the total and standardised numbers for each topic. The Table in Appendix I has representative examples of excerpts of classified and unclassified speeches and of those classified under each of the sub-topics.

It should be noted that as some speeches were classified under more than one topic, the sum of the percentages is greater than 100%. Figure 1.1 shows the distribution by topic of the classified speeches in the four sets: SDD, IJ and unclassified speeches in each of the two topics.

Table 1.1.
Key words

Topic	Terms
Environment	Environment, water, forest, hydro-
Debt	Debt, interest
Education	Education, school
Health	Health, NHS
Social security	Pension, social security, S.S.
Others	Agriculture, farmers, agricultural, police, TAP, RTP, RDP
Unclassified	–

Table 1.2.
Number of speeches in each topic
The total number includes SDD and IJ

Topic	Total number	percent-age	Number in sustainability	percent-age	Number in IJ	percent-age
Environment	11321	0.10	1397	0.32	301	0.32
Debt	9067	0.08	1200	0.28	305	0.33
Education	15500	0.14	1180	0.28	316	0.34
Health	13781	0.12	1390	0.32	295	0.32
Social security	13300	0.12	1595	0.37	302	0.33
Others	14805	0.13	9355	0.24	227	0.24
Unclassified	65904	0.58	625	0.14	132	0.14

Figure 1.1.
Distribution by sub-topic of speeches classified as being about sustainability, intergenerational justice, about both and unclassified in IJ or SDD. The total number of speeches in each group is also identified in each title
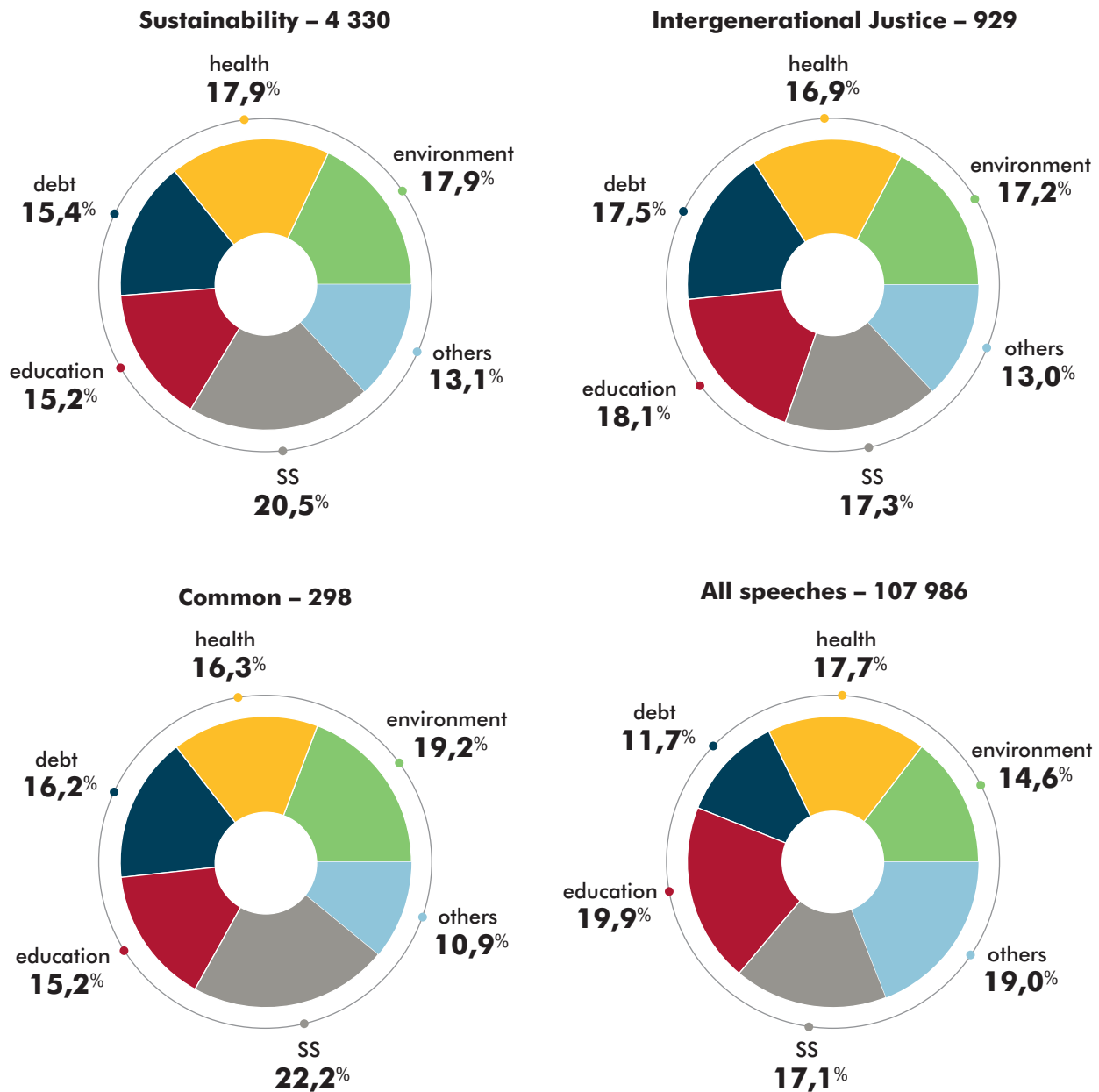
These distributions were dissected further by means of an inverse analysis. We classified all the speeches as mentioning one of the sub-topics identified above and analysed the frequency with which IJ, SDD and both were mentioned within each sub-topic. Figure 1.2 shows that the vast majority of speeches in each topic do not refer to either IJ or SDD.

Figure 1.2.
Distribution of the classification in IJ, SDD, both or neither within each sub-topic

Environment – 11321

11,24%
1,1%
1,55%
86,11%

Debt – 9067

12,08%
1,16%
2,21%
84,56%

Health – 13781

9,32%
0,77%
1,37%
88,54%

Education – 15500

6,97%
0,64%
1,4%
90,99%

Social Security – 13300

10,91%
1,08%
1,19%
86,82%

Others – 14805

6,42%
0,48%
1,05%
92,04%

No topic – 65904

0,2%
98,82%

IJ
Both
SDD
Neither
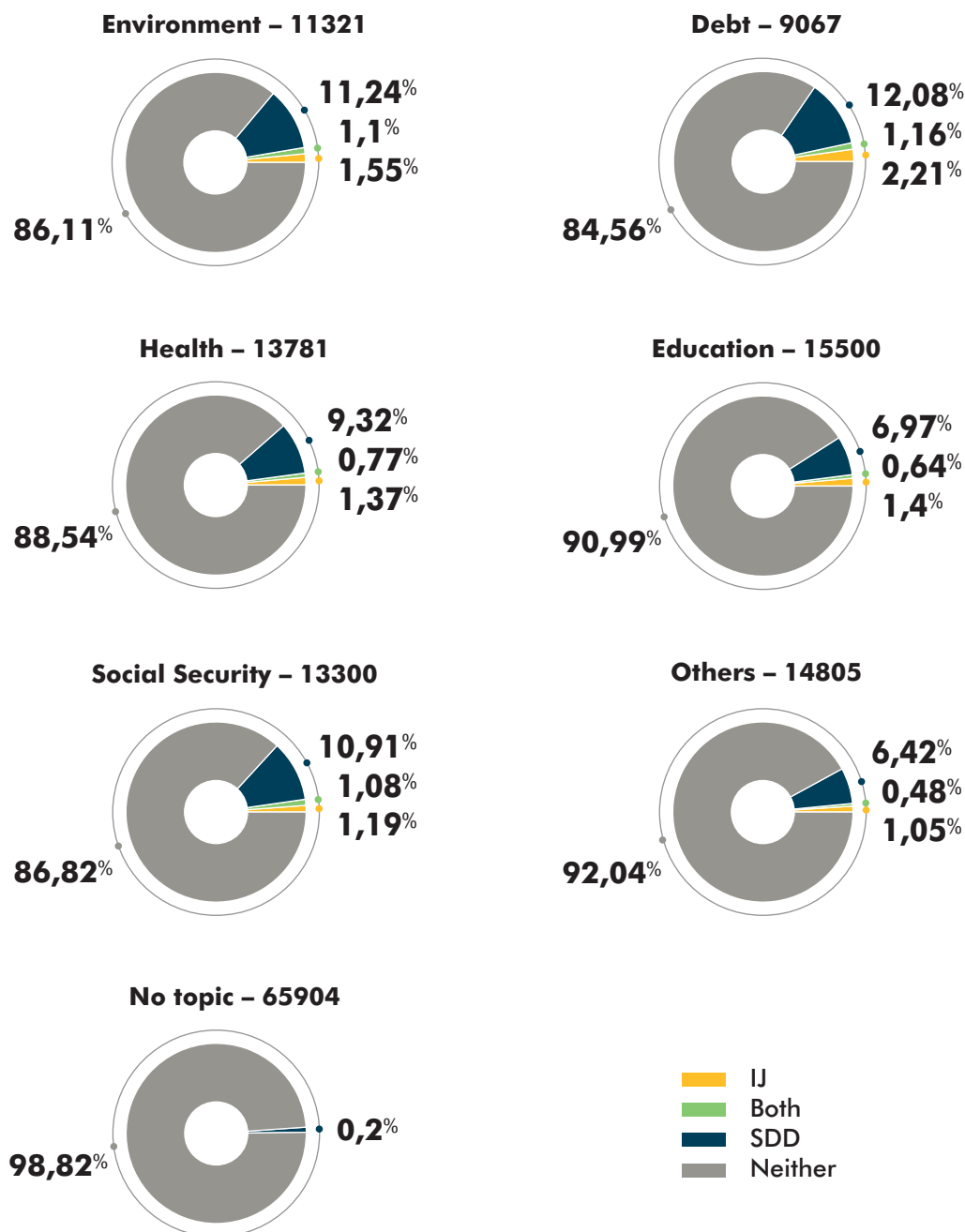
Figure 1.3 depicts the distribution by SDD and IJ in greater detail. It can be seen, for example, that IJ does not have a higher percentage than SDD in either sub-topic. The topic in which IJ has the highest percentage is education, while the lowest percentage is in social security. It should also be noted that the highest percentage is in SDD even in the unclassified speeches. This is in part explained by the fact that the sub-topics were defined based on the reading of the speeches classified as IJ.

In general, it is clear that both IJ and SDD are topics proportionally less debated in the Parliament, even in the contexts where they are more frequently mentioned.

Distribution of the classification in IJ, SDD or both within each topic

Environment – 1823
6,86%
16,51%
76,63%

Debt – 1610
6,52%
18,94%
74,53%

Health – 1791
5,92%
16,47%
77,61%

Education – 1595
6,21%
19,81%
73,98%

Social Security – 2041
7,06%
14,8%
78,15%

Others – 1320
5,38%
17,2%
77,42%

No topic – 776
2,45%
17,01%
80,54%

IJ
Both
SDD
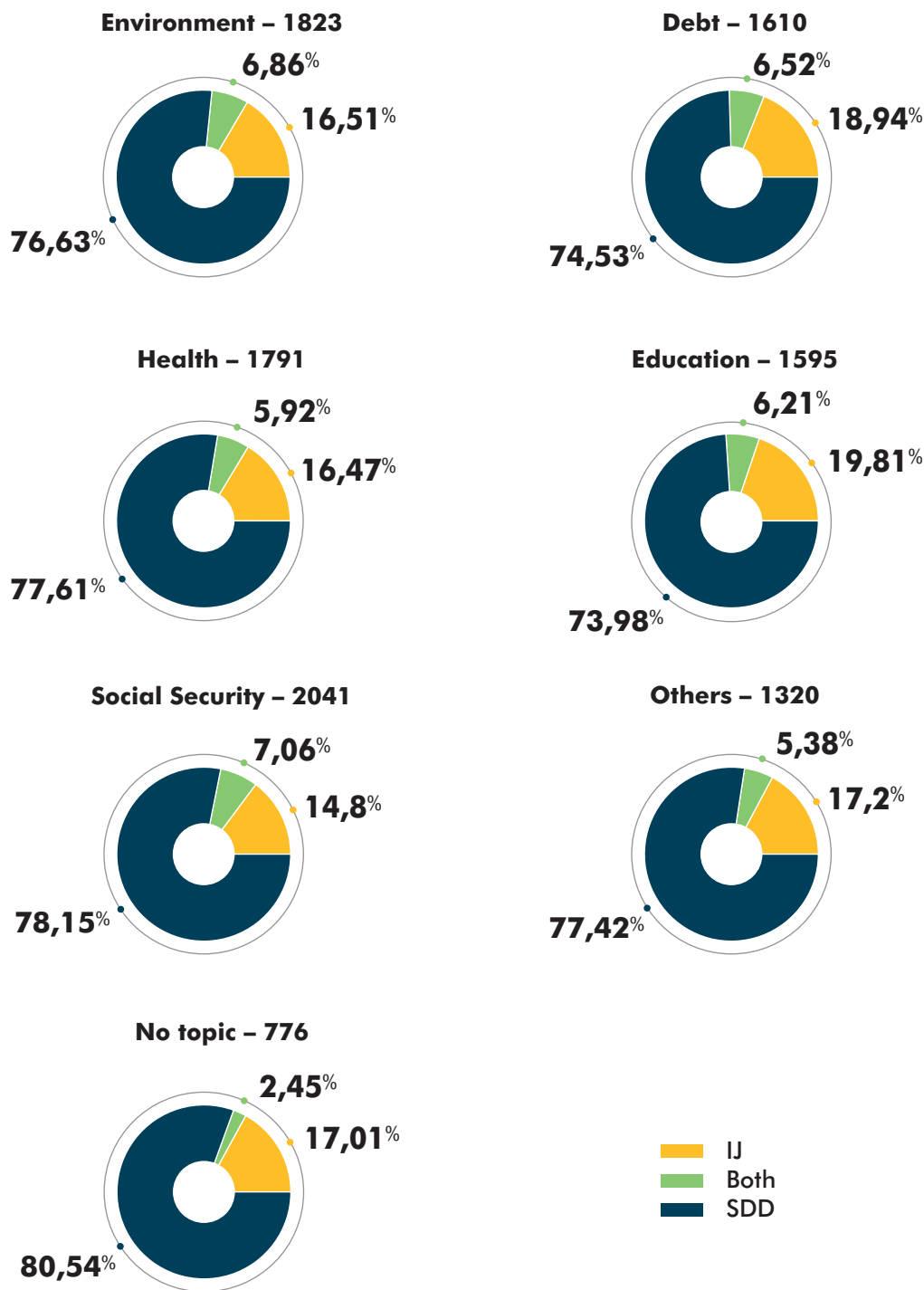
1.2.
TEMPORAL ANALYSIS: WHEN ARE SUSTAINABILITY AND INTERGENERATIONAL JUSTICE MENTIONED?

Figure 1.4 shows the evolution over time of the speeches that mention SDD and IJ.

Figure 1.4.
Frequency of parliamentary sessions in which SDD (blue) or IJ (green) is mentioned, using the same scale (top panel) or using different scales (bottom panel – green axis shows the frequency of mentions of IJ)
The data are grouped every four years (rolling average) for a better visualisation of the trends and their correlations (bottom panel, red box)

Sustainability and Intergenerational Justice over time

Although the SDD numbers are much larger than those for IJ, both the trends and distribution of topics are similar and the sessions in which one or other is mentioned are correlated significantly (Spearman's correlation ρ = 0.82, p = 0.004 – correlation made with the data grouped per year). This may be because these topics do in fact have similar dynamics or because the sub-topics (or contexts in which they are mentioned) vary in a similar way. To distinguish between these possibilities, we correlated the proportion of the different sub-topics within the speeches classified as SDD and IJ. This correlation is not significantly different from zero, perhaps because there is little variance between the various topics, both in SDD and IJ. We therefore performed an χ^2 test to compare the number of speeches on each topic. This test indicates that the two distributions by topic are different (p = 0.001), and that the greatest differences are in education, debt (2% and 2.9 % more common within IJ, respectively) and in social security (3.1% more common in SDD). Hence, despite the similar dynamics, the scope of these topics is different, and the upward trend may be due to the variation in mentions of the sub-topics rather than to IJ and SDD per se.

Figure 1.5.
Temporal dynamics of the various topics in Parliament
The colours represent the sub-topics or contexts

Topics over time (standardised by the total number of sessions)
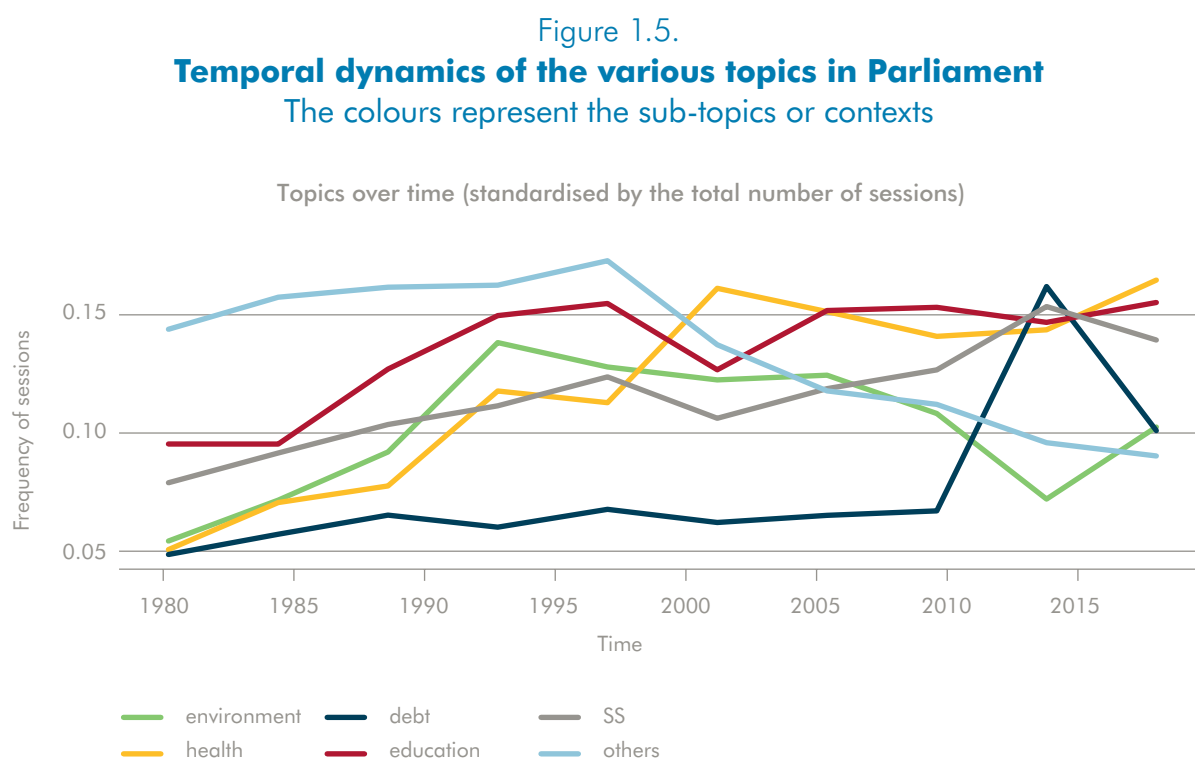
Figures 1.5, 1.6 and 1.7 show the evolution of the various sub-topics, in all the speeches, in those classified as IJ and in those classified as SDD, respectively. Some patterns stand out, notably the peak in mentions in the context of the debt (blue lines) during the financial crisis, accompanied by a decline in the topic of the environment (green lines) both in relative terms (as one would expect given the dominance of the question of debt), and in absolute terms.

Figure 1.6.

Temporal dynamics of the various topics within IJ

The top graph depicts the frequency of speeches about IJ relative to all the speeches in parliament, with the colours representing the sub-topics or contexts in which IJ is mentioned. The graph below depicts the frequency of speeches per topic, relative to the total speeches on IJ

Topics over time (standardised by the total number of sessions)

Topics over time (standardised by the sessions that mention Intergenerational Justice)

environment   debt   SS

health   education   others

Topics over time (standardised by the total number of sessions)

Topics over time (standardised by the sessions that mention sustainability)

| environment | debt | SS |
| health | education | others |

We compared the increase in the frequency of these sub-topics in parliament with the increase in IJ and SDD. Both IJ and SDD are correlated with these sub-topics (Spearman's correlation ρ=0.83 for IJ and ρ=0.68 for SDD, p<0.03), Figure 1.8. Therefore, and as discussed above, this may indicate that the increase in the frequency of IJ/SDD is related to the increase in these topics in parliament.

**Correlation between the sum of the frequency of speeches on the various
sub-topics (health, education, SS, environment, debt and others)
and the frequency of speeches on IJ (left) or SDD (right)**
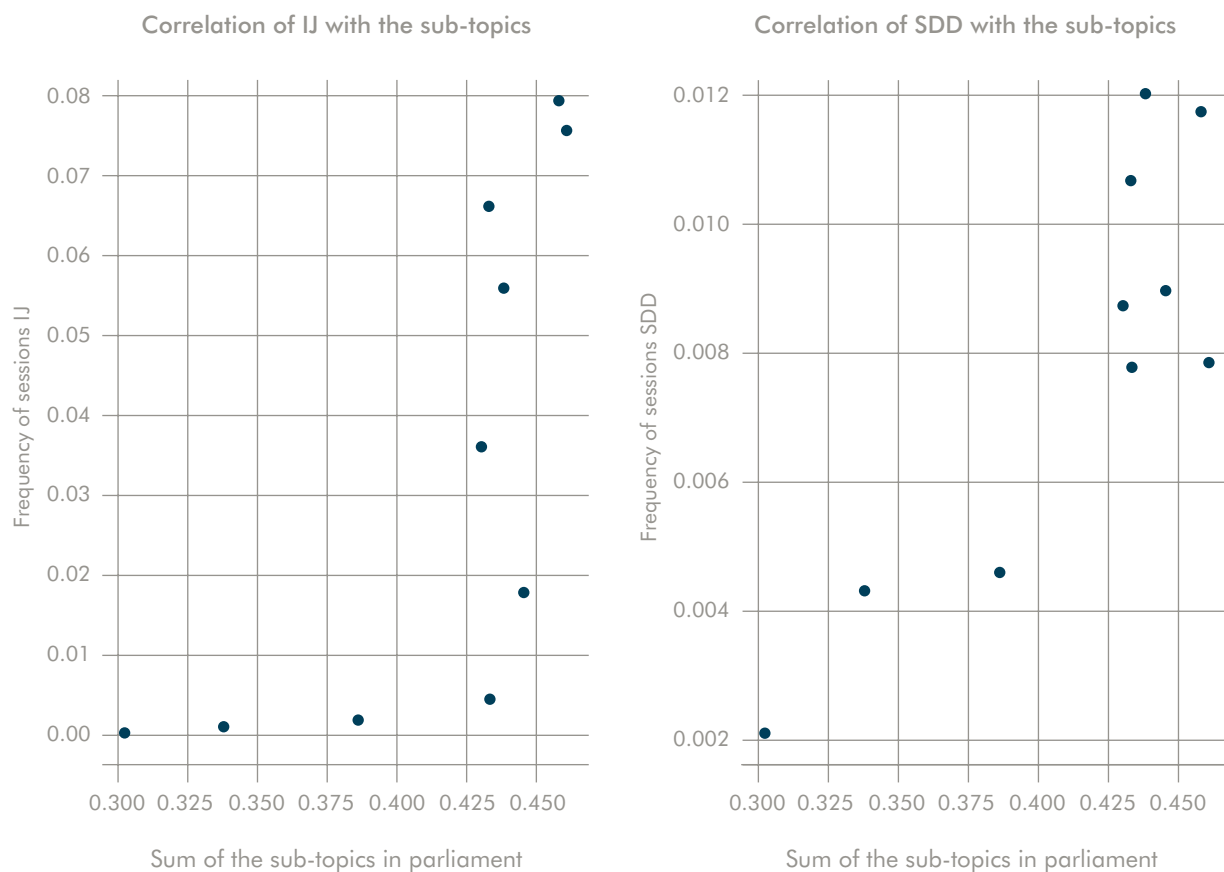
1.3.
PARLIAMENTARY SPEECHES
– INTERGENERATIONAL JUSTICE

There was an upward trend in the mentions of IJ over time, reaching a high point in 2005 and then remaining stable during the financial crisis period, or at least until 2014 (Figure 1.9).

Figure 1.9.
Frequency of parliamentary sessions in which IJ is mentioned
The data are grouped in four-year periods (rolling average) to provide
a better visualisation of the trend

Intergenerational Justice over time
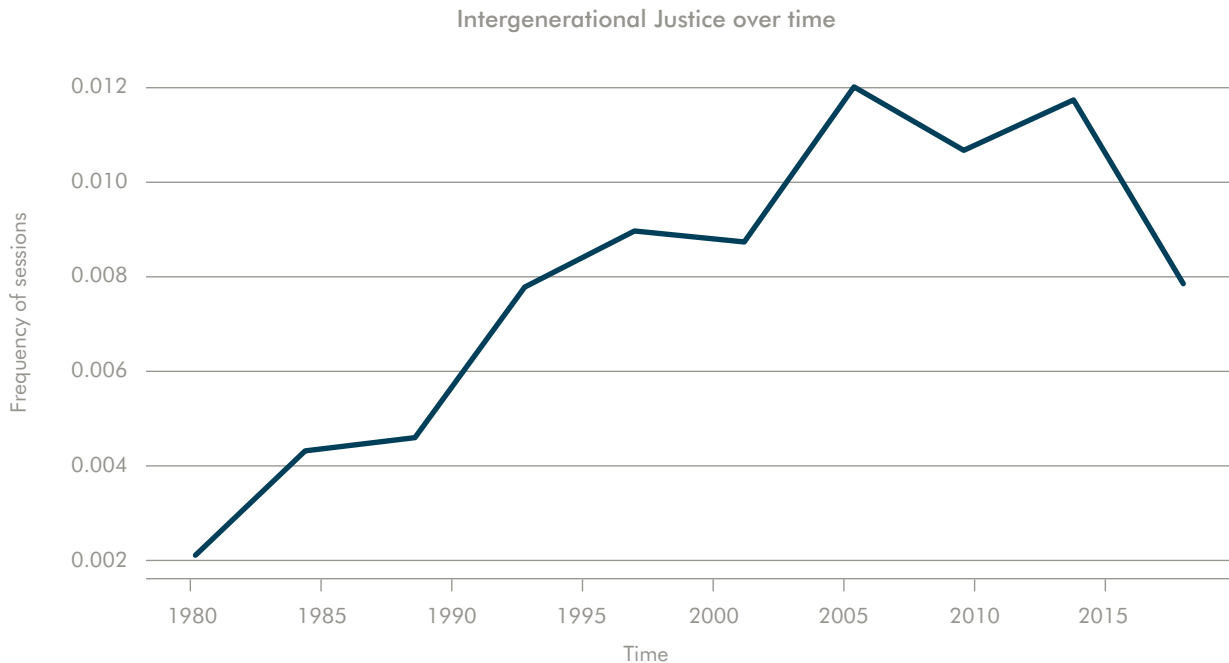
1.3.1. Analysis by speaker: Who speaks about Intergenerational Justice?

For an understanding of which parties, MPs and MGs speak most about IJ, we restricted the analysis to the last 19 years (from 1 January 2000) for three reasons: 1) the frequency of speeches in this period is higher; 2) it is when we have the greatest confidence in the classification of the speakers and 3) it is the most relevant period for any intervention to be made. We thus began with 56 901 speeches, 585 of which were classified as mentioning IJ (1%). During this period, interventions were recorded from 1 056 different speakers, 261 of whom speak at least once about IJ (25%). We therefore made two different analyses and with distinct interpretations. First, we looked at the number of speakers per party who refer to IJ (Figure 1.10A) and then examined the frequency of speeches per party (Figure 1.10B). Throughout the document, we will use the word "Speaker" to designate any MP or MG who is registered in our database as having delivered any speech during the period under analysis. There are therefore more Members of Parliament and Members of Government than speakers.

As was to be expected, a larger proportion of MPs in the smaller parties speak about IJ (Figure 1.10A) because each MP has more opportunity to speak on any subject. The extreme case is PAN which, whenever it had the opportunity to speak on a subject, had to do so through its only MP (until 2019). This effect is offset after standardising for the total number of speeches (Figure 1.10B). Curiously, PAN and PEV continue to be the parties that speak most about IJ. Our next step was to see in each case whether the differences are significant.

Figure 1.10.
**Panel A – Number of speakers who refer to IJ, standardised by the total
number of MPs in each party who were in Parliament from 2000.
Panel B – Number of speeches on IJ, standardised by the total number
of speeches made by each party from 2000**

A

B
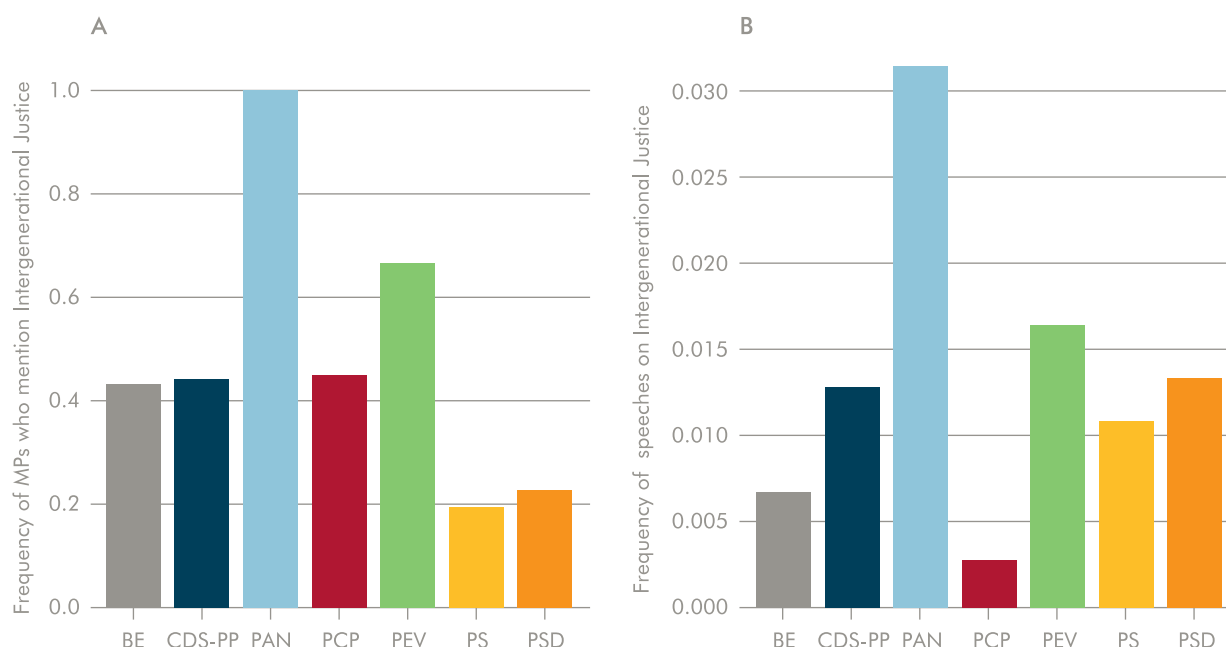
For the speaker numbers (which are discrete measurements), we used a contingency table where we applied the χ^2 test. Very briefly, this test compares the speaker counts in each class (those that speak about IJ and those that do not) and estimates the expected number of speakers given the overall frequency (25%) and given the number of speakers from each party. We found that there are, in fact, significant differences between parties (p value < 0.001, whether or not we include PAN and PEV). We then tried to see which parties stood out most by conducting pairwise comparisons. To this end, we use Fisher's exact test which is similar to χ^2 but more precise. With pairwise comparisons and correcting for multiple tests (10 tests, removing PAN and PEV), we identified six significant differences (p value < 0.005 to take into account the fact that we conducted 10 tests). PS and PSD are different from the other three parties and PCP/BE/CDS have more speakers who speak about IJ than the PS/PSD. As noted above, these differences may be due to the total number of speakers, which varies greatly for each of these parties.

We therefore also conducted an analysis by party, not speaker. In order to compare the frequencies of speeches by each party (Figure 1.10B), we used the information on the frequency of speeches per speaker and applied the Kruskal-Wallis test, assuming continuous frequencies, which may or may not have a normal distribution. This test showed that there are differences between the parties (p<0.001). We thus applied the same test pairwise to identify which parties are different, correcting for multiple tests. After removing PAN and PEV (which have too few speakers for the tests to be reliable), we found there are two groups: PCP/BE speak significantly

less about IJ than PS/PSD (the *p* values between each group are less than 0.05 and are greater between groups). On the other hand, CDS is only different from PCP, and lies halfway between the two groups. These differences go in the opposite direction to that shown in Figure 1.10A. Thus, the joint analysis indicates that although a large proportion of MPs from BE and PCP speak about IJ, they do so only occasionally. The over-representation of PS and PSD may be due to the fact that they are governing parties. The Portuguese Parliament has had relatively few actors in the last 45 years; there have been roughly 2500 MPs, about 200 of whom were at some time MGs (8%). To test whether there is an over-representation of actors with these governing responsibilities, we selected the 100 speakers who spoke most frequently about IJ (the extension of Table 1.4) and analysed how many of them were MGs at any given time; we found that more than one third of MGs were in this group. This may indicate that the topic of IJ is raised in Parliament predominantly by Members of Government (present, past and future).

We also conducted an analysis for the presence of possible gender differences using the same tests as those described above; we found no gender differences for the speakers who refer to IJ (Figure 1.11A and B − Fisher and Kruskall-Wallis exact test respectively, $p > 0.05$). However, when we included the speeches prior to the year 2000, we saw significant differences, Fisher's exact test, $p = 0.03$. In the case of the frequency of speeches, the differences were not significant, irrespective of the time interval considered (Kruskal-Wallis $p = 0.4$ in both cases). Given that there have been far fewer women in Parliament than men, the vast majority of whom were after the year 2000 (312 women vis-a-vis 857 men after 2000, and a total of 386 vis-a vis 1670), it is possible that these gender differences are being mitigated precisely because the male/female ratio is increasing (Figure 1.11).

Similarly, we compared the age of speakers when they mentioned IJ and when they delivered speeches in general (Figure 1.12). We found no differences in the distribution of the ages of the MPs that mentioned IJ and those that did not do so (χ^2 , $p = 0.8$).

As this analysis did not identify any clear pattern, we looked at the year of birth of the speakers. The age and the year of birth are obviously correlated (Spearman's coefficient $\rho = -0.9$) but we did not see any clear pattern when we looked at the distribution of the speakers' years of birth and of the speakers that mention IJ. The Figure 1.13 shows these data.

Figure 1.11.
Panel A – Number of speakers by gender that speak about IJ, standardised by the number of speakers and MPs that have been in Parliament since 2000. Panel B – Number of speeches on IJ since 2000, standardised by the total speeches by each gender. Panels C and D – the same as panels A and B respectively but with information since 1976

A – Per MP, since 2000

B – Per speech, since 2000

C – Per MP, since 1976

D – Per speech, since 1976
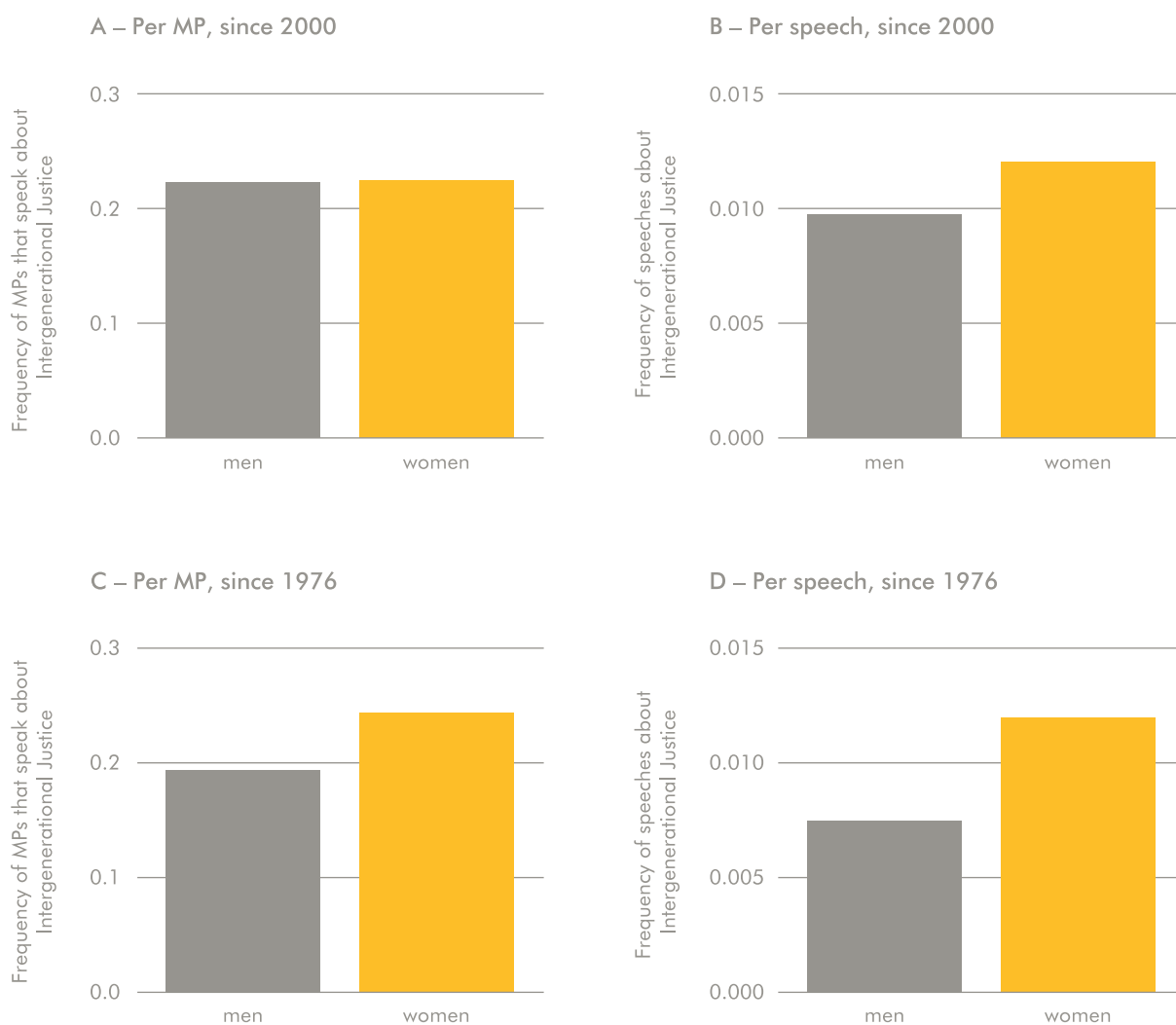
Figure 1.12.

Panel A – Distribution of ages of speakers when they refer to IJ (blue) and in all speeches (red). In the first case, the median is 45.9 and in the second it is 46.3. **Panel B – Ratio of the frequencies of speakers between those who refer to IJ and those who speak generally**. A ratio of 1 means that the frequency of speakers of that age is the same across the two distributions. A value above 1 indicates an excess of speakers that refer to IJ, and below indicates there are proportionally fewer speakers of that age that refer to IJ. The grey box comprises the average +/- 2 standard deviations and the darker box represents the average +/- 1 standard deviation. The points outside these boxes are considered outliers
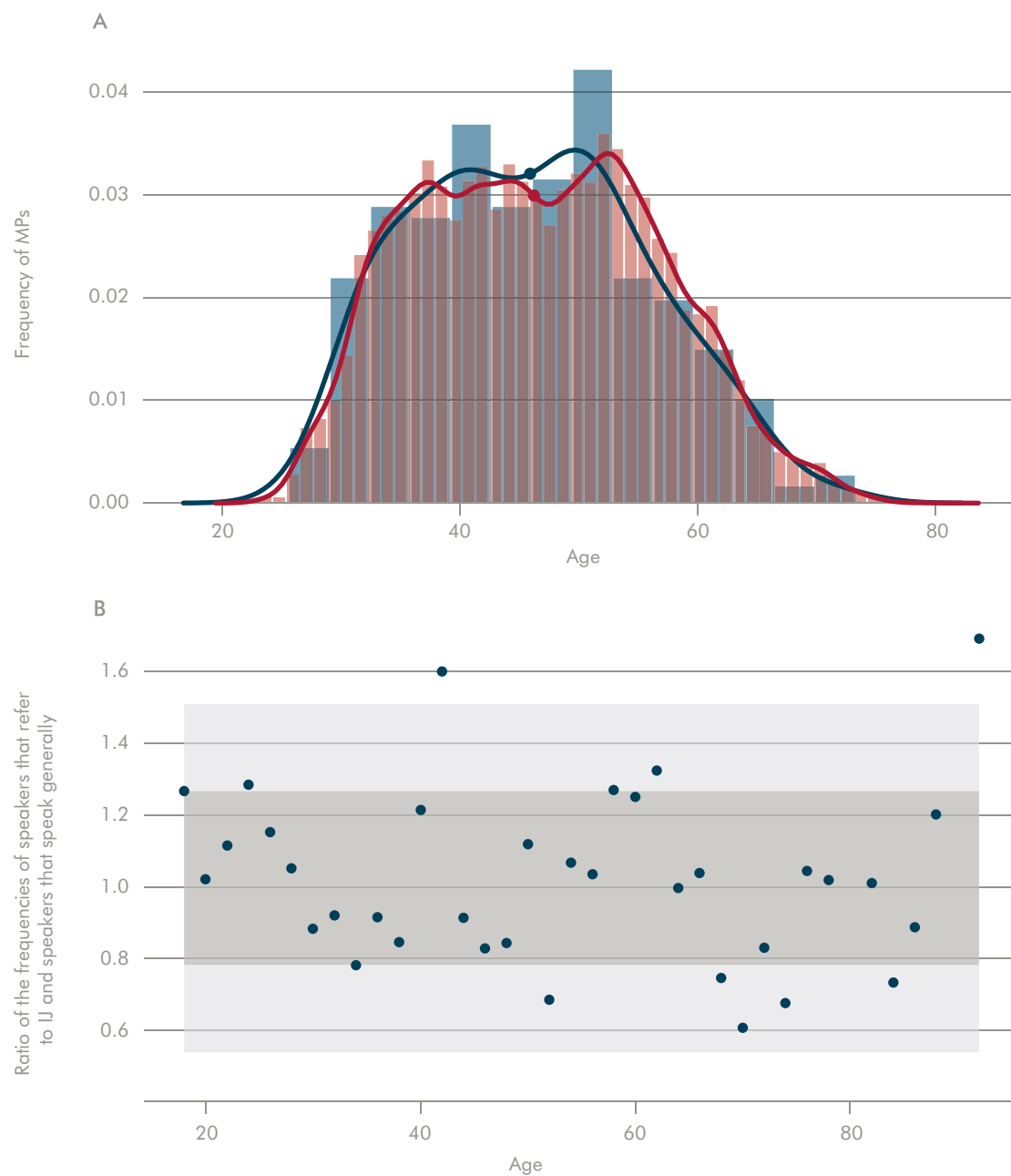
Figure 1.13.
Panel A – Distribution of years of birth of the speakers when they refer to IJ (blue) and the ages when they speak in general (red). In the first case, the median is 1963 and in the second 1965. **Panel B – Ratio of the frequencies of speakers between those who refer to IJ and those who speak**. A ratio of 1 means that the frequency of speakers born in that year is the same between the two distributions. A value above 1 indicates an excess of speakers that refer to IJ and below 1 indicates that there are proportionally fewer speakers of that year of birth speaking about IJ. The line represents the best linear regression that explains the data. $R^2 = 0.01$ and the correlation is not significant (Spearman's correlation $\rho = 0.6$)
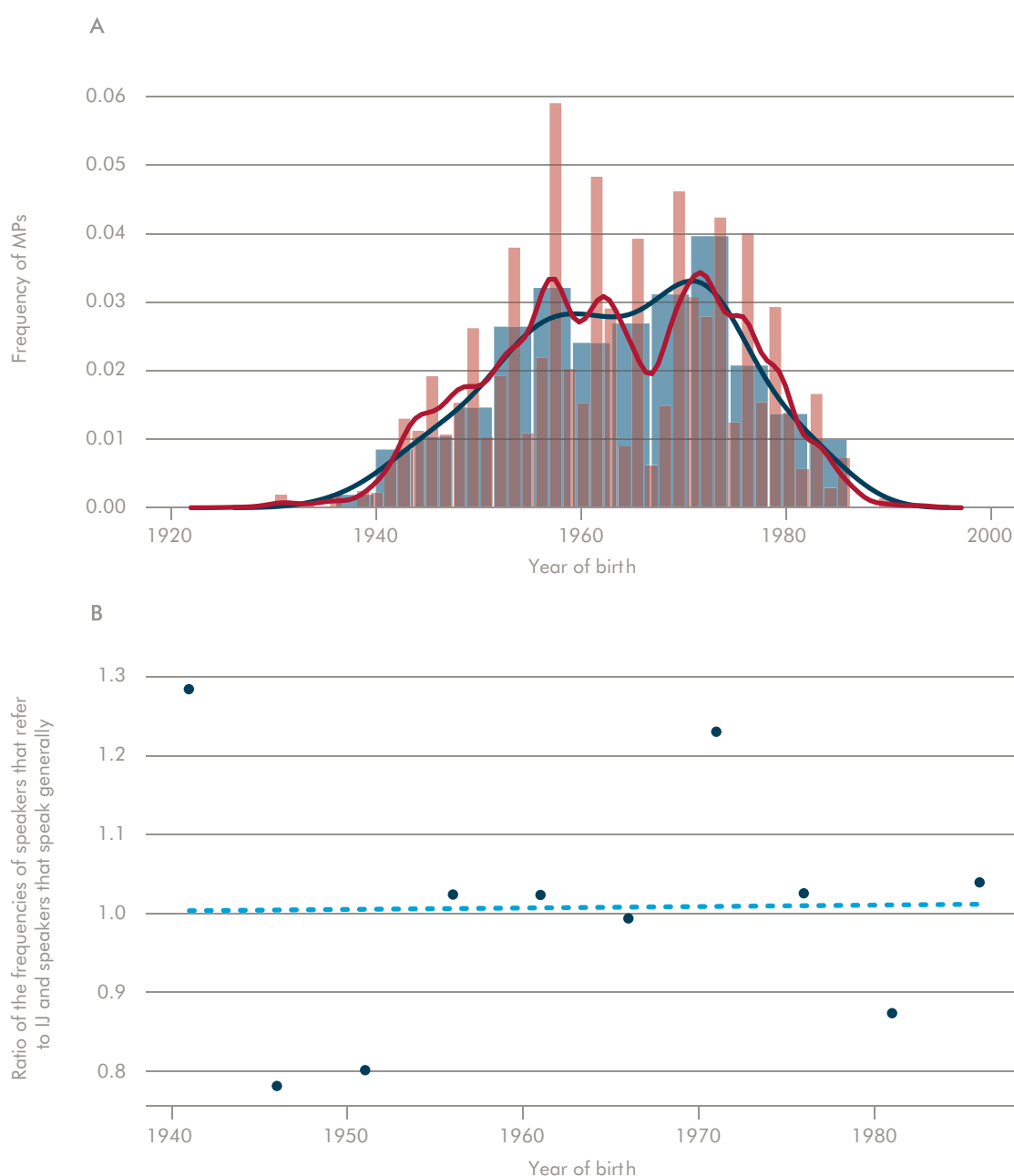
We performed a regression to obtain a better understanding of the interaction between the year of birth, gender and party; the results are shown in Table 1.3. We do not include age due to its very strong correlation with year of birth, which could skew the regression. The results suggest that both the year of birth and the gender have an effect, that is, a speech about IJ has a 0.6 probability of being made by a woman; and this probability is reduced by 0.0096 for each additional year in the date of birth. Differences are also found between the parties, with IJ speeches being more likely to be delivered by the PAN, PS or PSD. It should be noted however that only gender has a *p* value below 0.02. The significance of the effect of both the year of birth and the parties would be lost if we corrected for multiple tests. Hence, these should only be taken as suggestive findings.

Below, we make a more detailed analysis of the distributions of the number and frequency of speeches by speaker. The aim is to identify who speaks most about IJ, both in absolute and relative terms, within each party. Figures 1.14A and B show these two distributions, by party. The circles represent the outliers, that is, speakers who speak more than most of their colleagues on the bench, after restricting the analysis to those who made more than five speeches during their time in parliament. Table 1.4 shows the names of the speakers who stood out most from their parties for the frequency of speeches on IJ and Table 1.5 shows the speakers who stood out most in absolute terms, that is, those who made the most speeches about IJ.

Table 1.3.
Logit regression of the frequency of speeches that refer to IJ

Characteristics of Speaker	Coefficient (standard error)
Year of birth	-0.0096* (0.004)
Female	0.4** (0.1)
BE	1.2 (1)
CDS-PP	1.9 (1)
PAN	2.8* (1)
PCP	0.56 (1)
PEV	1.78 (1)
PS	2.11* (1)
PSD	2.4* (1)
Constant	12.78 (2.8)

* p<0.05; ** p<0.001

The logit regression coefficients are log odds, that is they are interpreted as the logarithm of the probability of having, or not, a certain characteristic, for example, 0.4 is the logarithm of the ratio of the probability of a speech on IJ being made by a woman and the probability of it being made by a man.

Figure 1.14.
**Distributions of the number (A) and frequency (B) of speeches about
Intergenerational Justice by speaker and by party**. The red line represents
the median and the box represents the values between the first and the third quartiles.
The whiskers represent the third quartile plus 1.5 times the difference between the first
and third quartiles. The circles represent outliers that are located above the top of
the whiskers
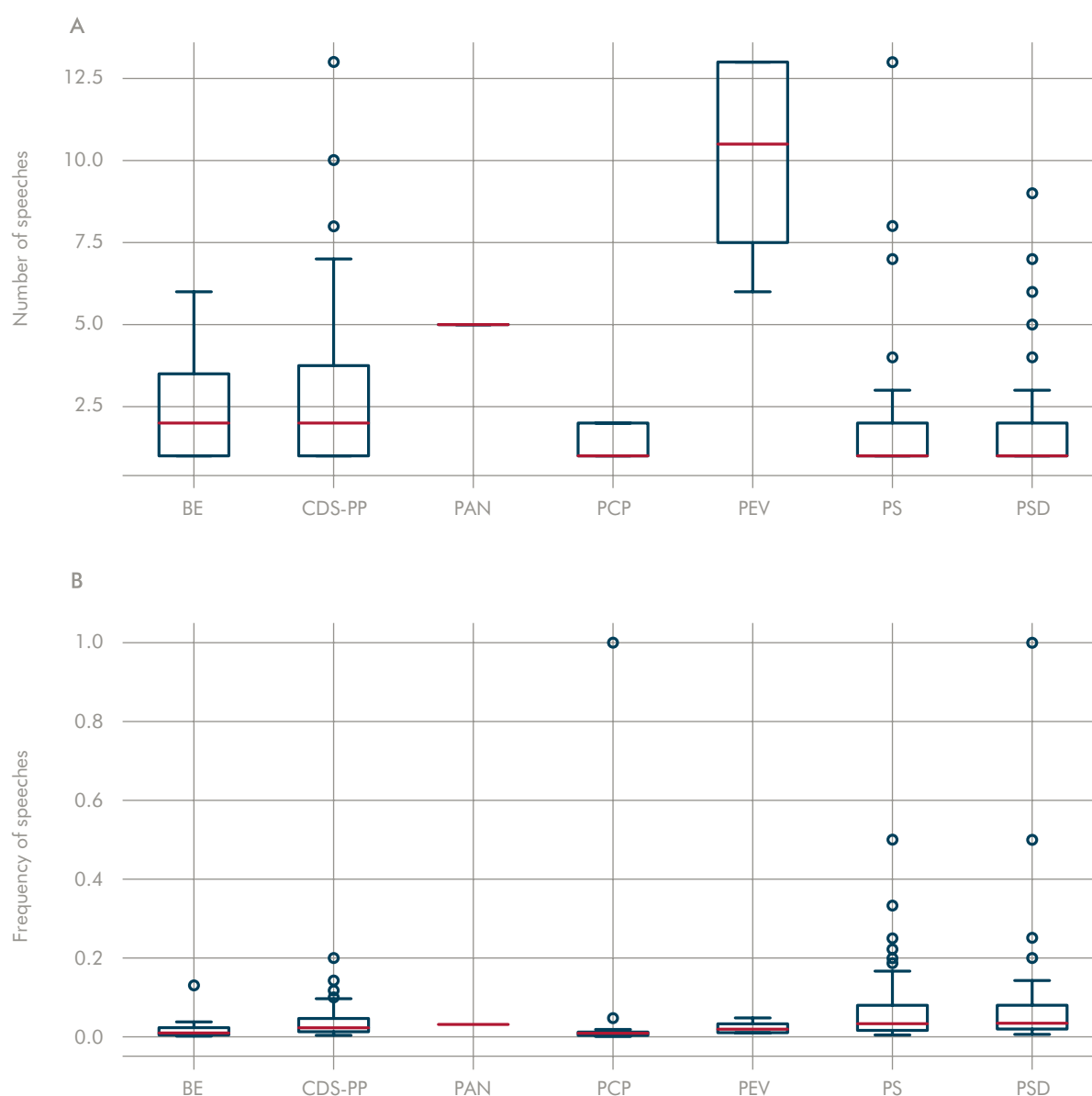
Table 1.4.

Speakers with a greater frequency of speeches about IJ

Party	Name	Frequency of speeches
BE	Alda Maria Botelho Correia Sousa	0.13
CDS-PP	Antonino Aurélio Vieira de Sousa	0.14
CDS-PP	António Pedro Carvalho Morais Soares	0.112
CDS-PP	Luís José Vieira Duque	0.10
PCP	Joaquim Manuel da Fonseca Matias	0.05
PCP	Eugénio Óscar Garcia da Rosa	0.05
PS	Mário Lino	0.33
PS	Maria Cidália Bastos Faustino	0.22
PS	Carlos Baptista Lobo	0.22
PS	Emanuel Augusto Santos	0.19
PSD	Mário José Magalhães Ferreira	0.20

Table 1.5.

Speakers with the most speeches about IJ

Party	Name	Number of speeches
CDS-PP	Nuno Miguel Miranda de Magalhães	13
CDS-PP	Luís Pedro Russo da Mota Soares	10
CDS-PP	Paulo Sacadura Cabral Portas	8
PS	Luís Afonso Cerqueira Natividade Candal	13
PS	Guilherme Valdemar Pereira de Oliveira Martins	4
PS	Augusto Ernesto Santos Silva	4
PS	António Luís Santos da Costa	4
PS	Alberto de Sousa Martins	4
PS	Maria José Guerra Gamboa Campos	4
PS	Elza Maria Henriques Deus Pais	4
PS	José Adelmo Gouveia Bordalo Junqueiro	4
PS	Luís Filipe Marques Amado	4
PS	José Sócrates Carvalho Pinto de Sousa	7
PS	Maria de Belém Roseira Martins Coelho Henriques de Pina	8
PSD	Maria Luís Casanova Morgado Dias de Albuquerque	4
PSD	José Manuel Ferreira Nunes Ribeiro	5
PSD	Maria Manuela Dias Ferreira Leite	5
PSD	Luís Filipe Alexandre Rodrigues	6
PSD	Pedro Manuel Mamede Passos Coelho	6
PSD	Adão José Fonseca Silva	7
PSD	Elsa Maria Simas Cordeiro	4
PSD	Luís Filipe Montenegro Cardoso de Morais Esteves	9
PSD	Miguel Bento Martins da Costa de Macedo e Silva	4
PSD	Carlos Eduardo Almeida de Abreu Amorim	5
PSD	Luís Filipe Valenzuela Tavares Menezes Lopes	5

1.3.2. Analysis by topic: In what contexts is intergenerational justice mentioned?

As described in the first section, the speeches were classified in six sub-topics (or contexts), based on key words. To glean a better understanding of how these sub-topics are distributed across the parties, our analysis focused again on the post 2000 period. Figure 1.15A shows the distribution by topic within IJ for each party. We again note that the same speech may be classified under more than one topic.

A χ² analysis shows that there are differences between the parties ($p < 0.001$). We performed a principal component analysis (PCA) to learn more about where these differences originate. Figure 1.15B shows the two principal components that explain 71% and 16% of the variance, respectively.

Figure 1.15.
**A – Distribution of IJ speeches by each party per identified topic.
B – Principal components analysis of frequency of IJ speeches per topic and per party**

A – Distribution of topics per party

B – Principal components analysis (2)
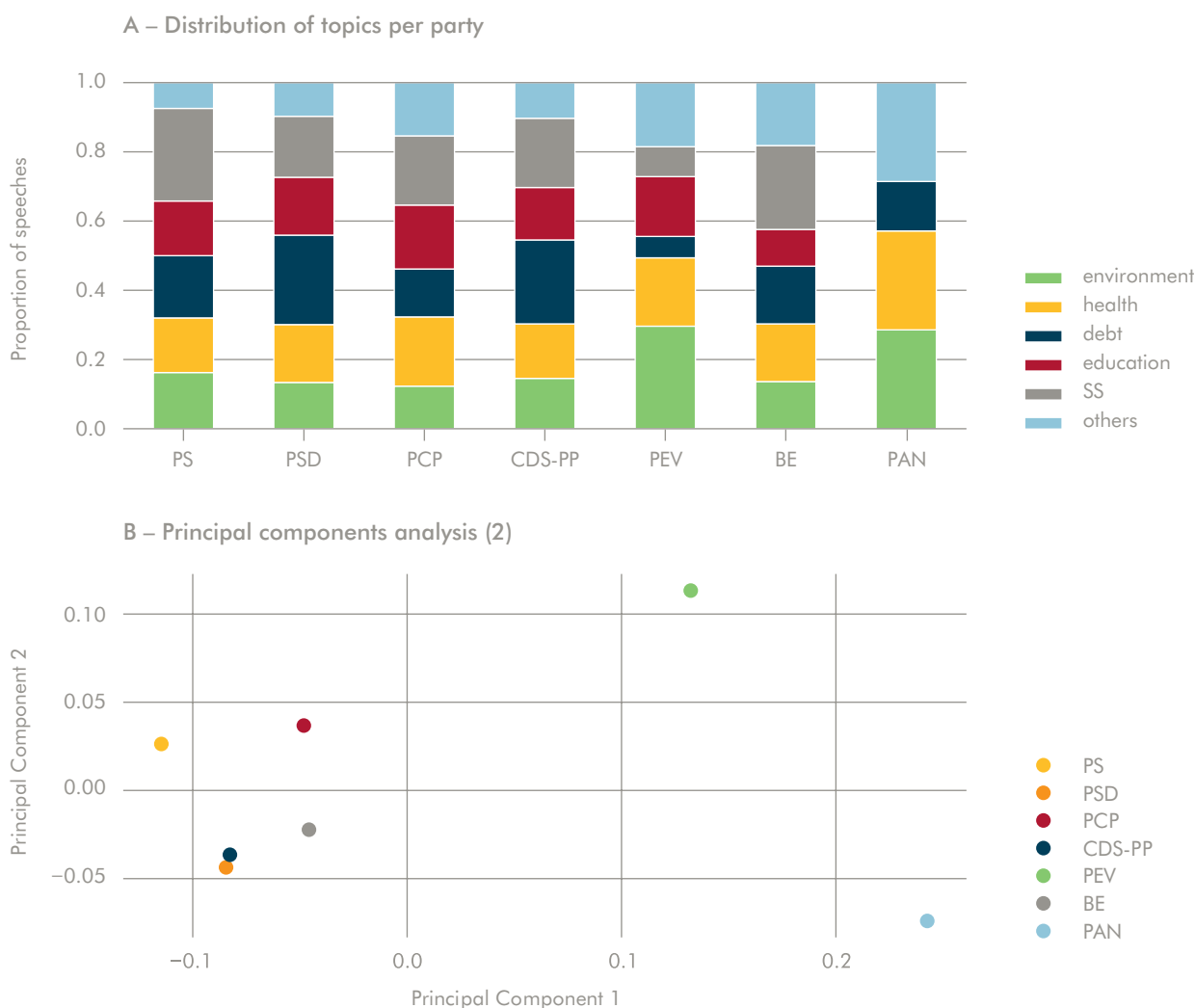
It should be noted that the first component separates PAN and PEV from the other parties (as previously observed), while the second groups PS and PCP, and BE, PSD and CDS. The principal components of a PCA are made up of various real components (in this case, the frequency of speeches on each topic) and understanding which most contribute to the separation is not straightforward. However, it is possible to correlate each component with each one of the topics. We restricted the analysis to the two principal components, which explain 94% of the differences between the parties; Table 1.6 shows the values of these correlations. Examples of some of the speeches delivered by speakers from the various parties can be found in Appendix II. We can see that PAN and PEV stand out for speaking more about IJ in the context of the environment and less in the context of social security, while PS and PCP speak more in the context of the sub-topic of education and less in the context of the sub-topic of debt than PSD, CDS and BE. This can also be seen in Figure 1.15A.

Table 1.6.
Correlation between the principal components and the topics

	environment	health	debt	education	SS	others
Principal Component 1	0.45	0.26	-0.30	-0.30	-0.61	0.40615
Principal Component 2	0.40	-0.035	-0.60	0.66	0.206069	-0.071

Intergenerational justice in the context of each topic

In the previous sections, the analysis focused on the presence of terms related with IJ, identifying five main contexts, or sub-topics, in which these terms are used (debt, SS, education, environment and health). In this section, we invert the analysis just as in section 1.1.: we focus on the five contexts and ask how frequently IJ is mentioned when speaking about debt or the environment, for example. We start by analysing the temporal dynamics of each of the five contexts, both within the topic of IJ and elsewhere, from the start of the Third Republic (1976) until July 2018. The graphs in Figure 1.16 represent the number of speeches that include IJ (blue) and the total speeches on each sub-topic, or context (orange). The ratios between these two values for each topic are also represented. Although the number of speeches on IJ is limited, as noted previously, there seems to be an upward trend in all of the topics. This raises the following question: are the references to IJ increasing simply because these five topics have become more popular? While we cannot give a definitive answer to this question, it seems to us that the increasing references to IJ have their own dynamics and are independent of the context in which they are placed. This is because we found that the topics within IJ increased in a very correlated manner (Figure 1.17A), whereas in general, although topics are on average also correlated (Figure 1.17B), this correlation is much smaller and, in one case, even negative.

Curiously, this negative correlation is between the environment and debt. Even within IJ, these are the two topics that are the least correlated. Turning to the distribution of topics over time

(Figure 1.16, and Figure 1.6), from around 2010, the references to debt increased while those to the environment had a relative decrease, both within the IJ context and in general. This could indicate that the topic of the environment is neglected at times of crisis, or when debt is more debated; in fact, although this trend may have been inverting since 2014, it is too early to draw conclusions.

Figure 1.16.

Temporal dynamics of the selected topics both in the context of intergenerational justice (blue) and in general (yellow). The graphs that only have a blue line represent the ratio between the blue and orange values. In the latter, the overall average appears as text in the respective panel
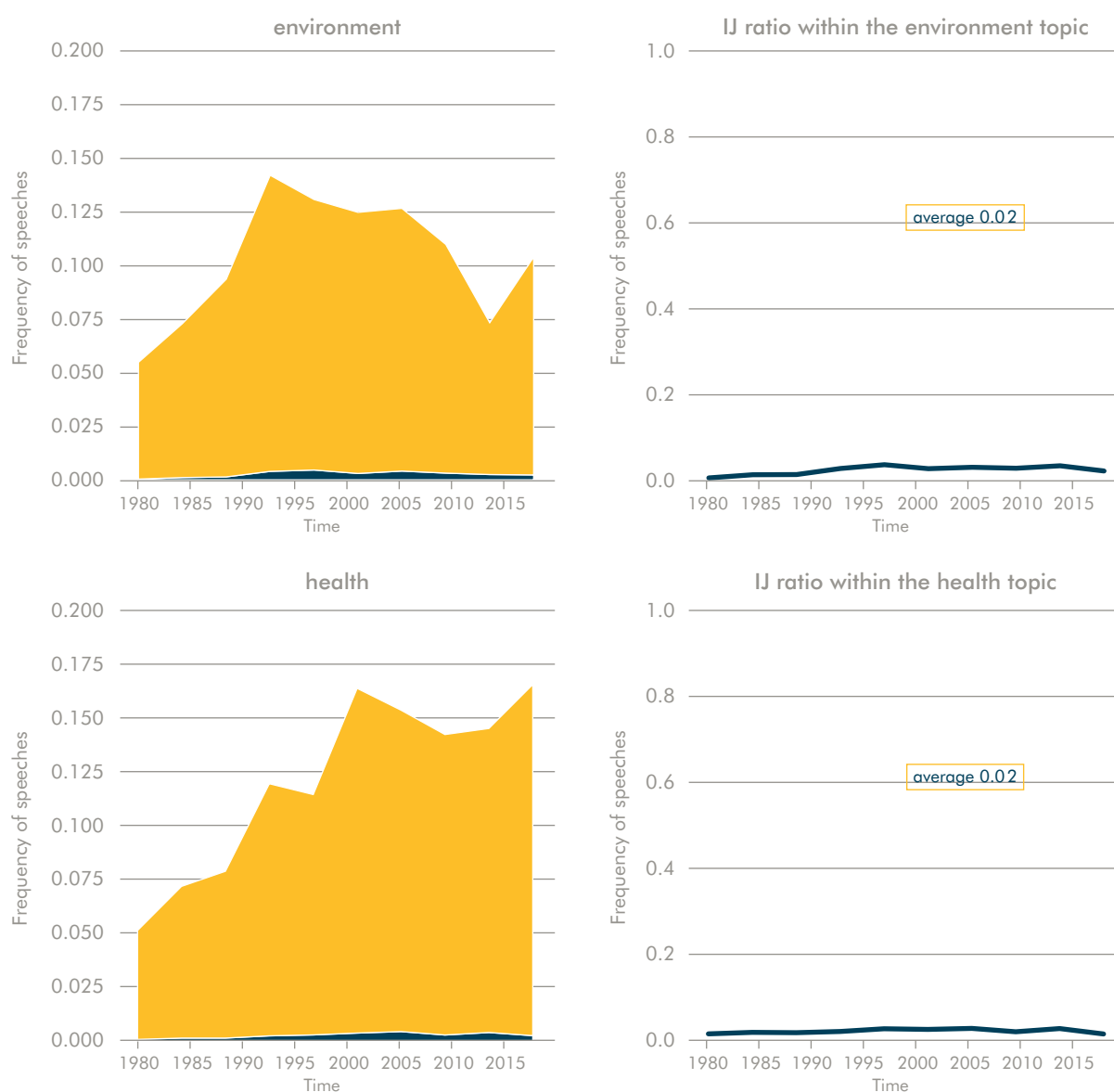
Figure 1.16. (continuation)
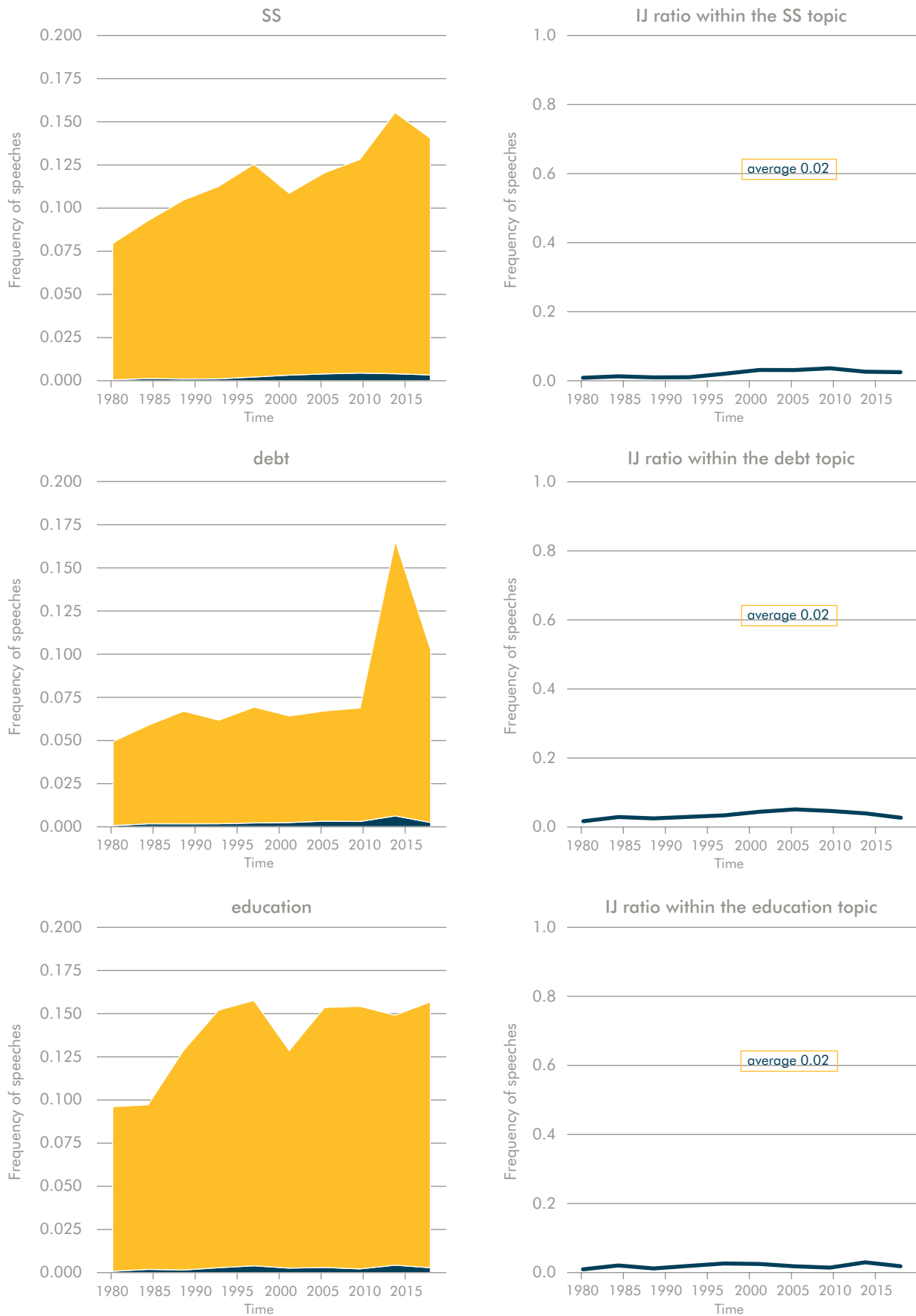
Figure 1.17.

Correlation between the frequencies of speeches on each topic, both within the speeches on IJ (left) and in the speeches overall (right)

Panels A and B show the relative frequencies of each topic and panels C and D show Pearson's correlation factors

A – Topics within IJ

B – Topics in general

environment   health   debt   education   SS

C – Correlation between the topics within IJ

D – Correlation between topics in general
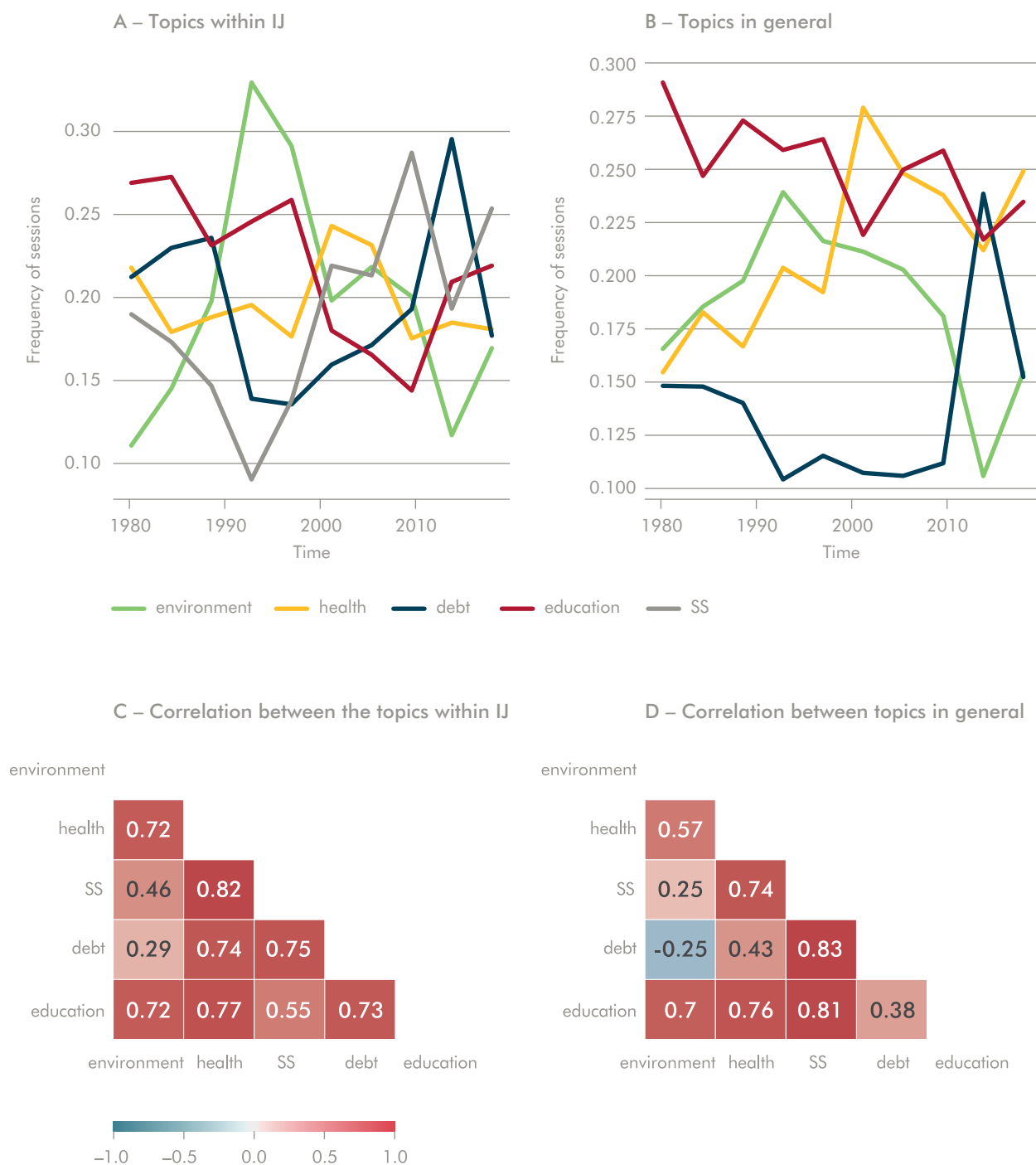
1.4.
PARLIAMENTARY SPEECHES – SUSTAINABILITY

Just as for IJ, we now limit our analysis to the speeches classified as mentioning sustainability (SDD). Figure 1.18 shows the frequency of speeches classified as SDD over time, also showing an upward trend but with the peak coming later.

Figure 1.18.
Frequency of parliamentary sessions in which SDD is mentioned. The data are grouped into 4-year periods (rolling average) for a better visualisation of the trend
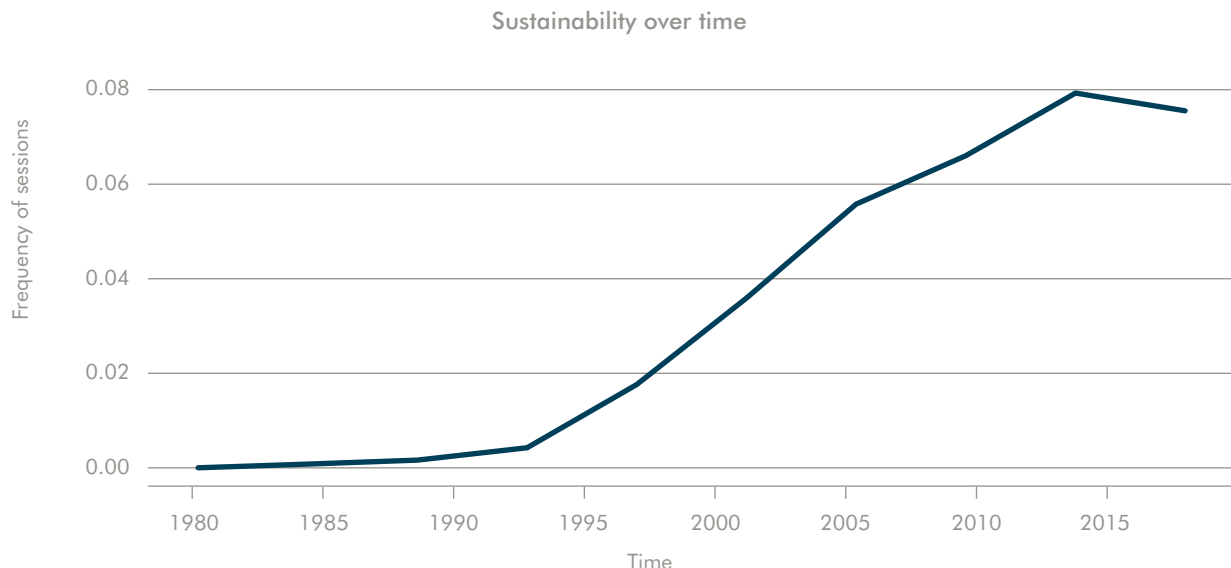
1.4.1. Analysis by speaker: Who speaks about sustainability?

We start by restricting the analysis to the last 19 years (from 1 January 2000) for reasons described above. We thus identify 56 901 speeches, 3860 of which refer to SDD (6.7%). During this period, we register interventions from 1 056 different speakers, 629 of whom mention SDD at least once (59%).

Just as for IJ, a larger proportion of the MPs from the smallest parties (PEV and PAN) speak about SDD (Figure 1.19A) and these remain the parties that speak most about SDD. This effect is offset when standardised for the total number of speeches (Figure 1.19B).

These differences are significant between parties (p value < 0.001, whether or not we include PAN and PEV) but, in terms of pairwise comparisons, the only significant differences are again between the largest parties i.e. PS/PSD, and the remaining parties. In relation to the frequencies of speeches (Figure 1.19B), we also find significant differences that form 2 groups: BE and PCP

Figure 1.19.
**Panel A – Number of speakers who refer to SDD, standardised by the total
number of MPs from each party that were in parliament from the year
2000. Panel B – Number of speeches about SDD, standardised by the total
speeches from each party from 2000**

A

B
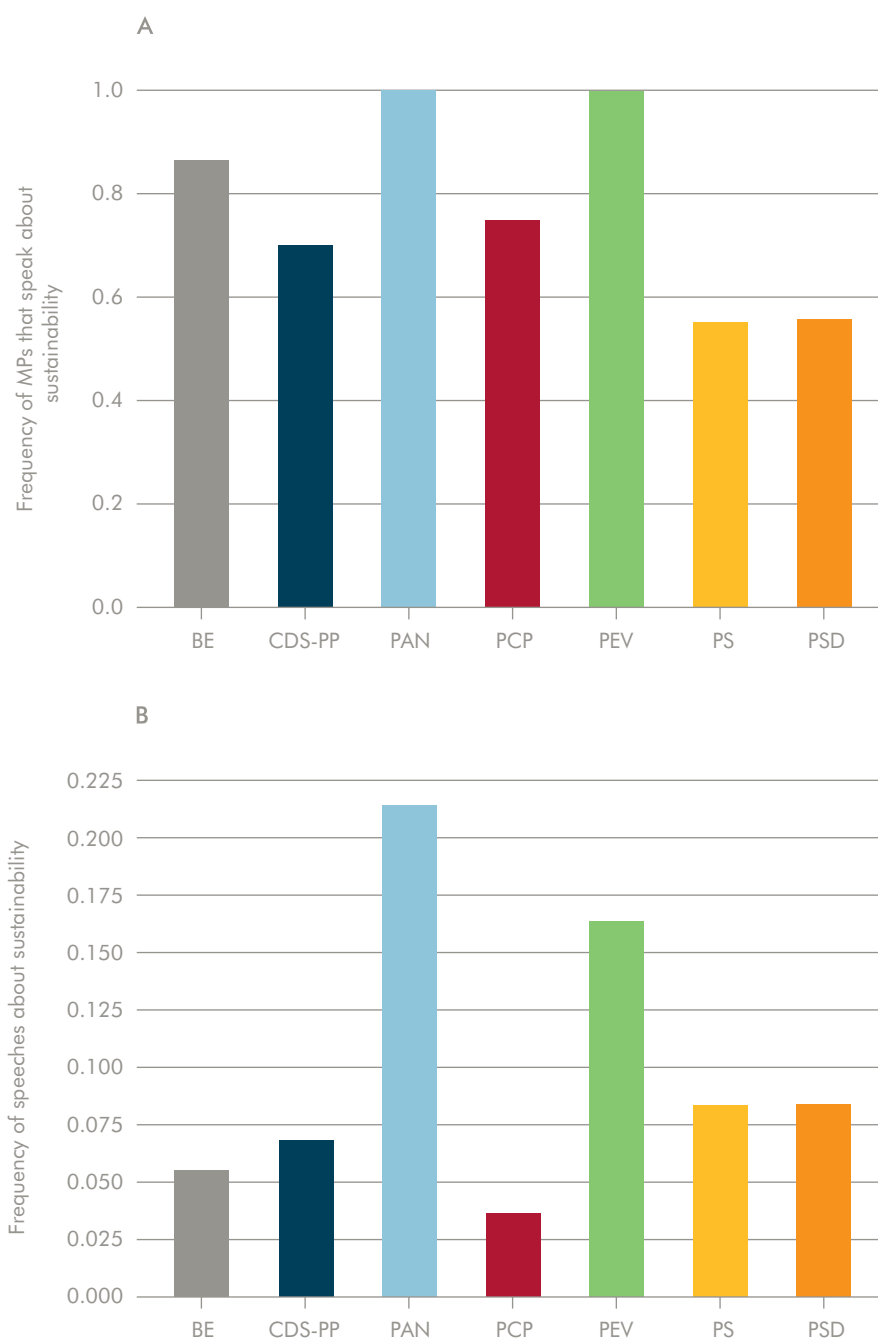
are not different from each other, but they are different from PSD, PS and CDS. Here the effect
of the small parties disappears, and differences in speeches are revealed. Overall, just as with
the speeches mentioning IJ, the data seem to indicate that a large proportion of the speakers
from BE and PCP speak about SDD, but do not do so often.

Using the same tests described previously, we confirm that there are no gender differences (Figure 1.20A $p = 0.05$). However, when we include the speeches prior to the year 2000, we see significant differences, $p < 0.001$ (Figure 1.20C). When we look at the frequency of speeches, we find there are gender differences regardless of the time period considered (Figures 1.20B and D $p \leq 0.01$).

Figure 1.20.
Panel A – Number of speakers of each gender who speak about SDD, standardised by the number of speakers and MPs who have been in parliament since the year 2000. Panel B – Number of speeches on SDD since 2000, standardised by the total number of speeches by each gender. Panels C and D – the same as panels A and B respectively but with data since 1976

A – Per MP, from 2000

B – Per speech, from 2000

C – Per MP, from 1976

D – Per speech, from 1976
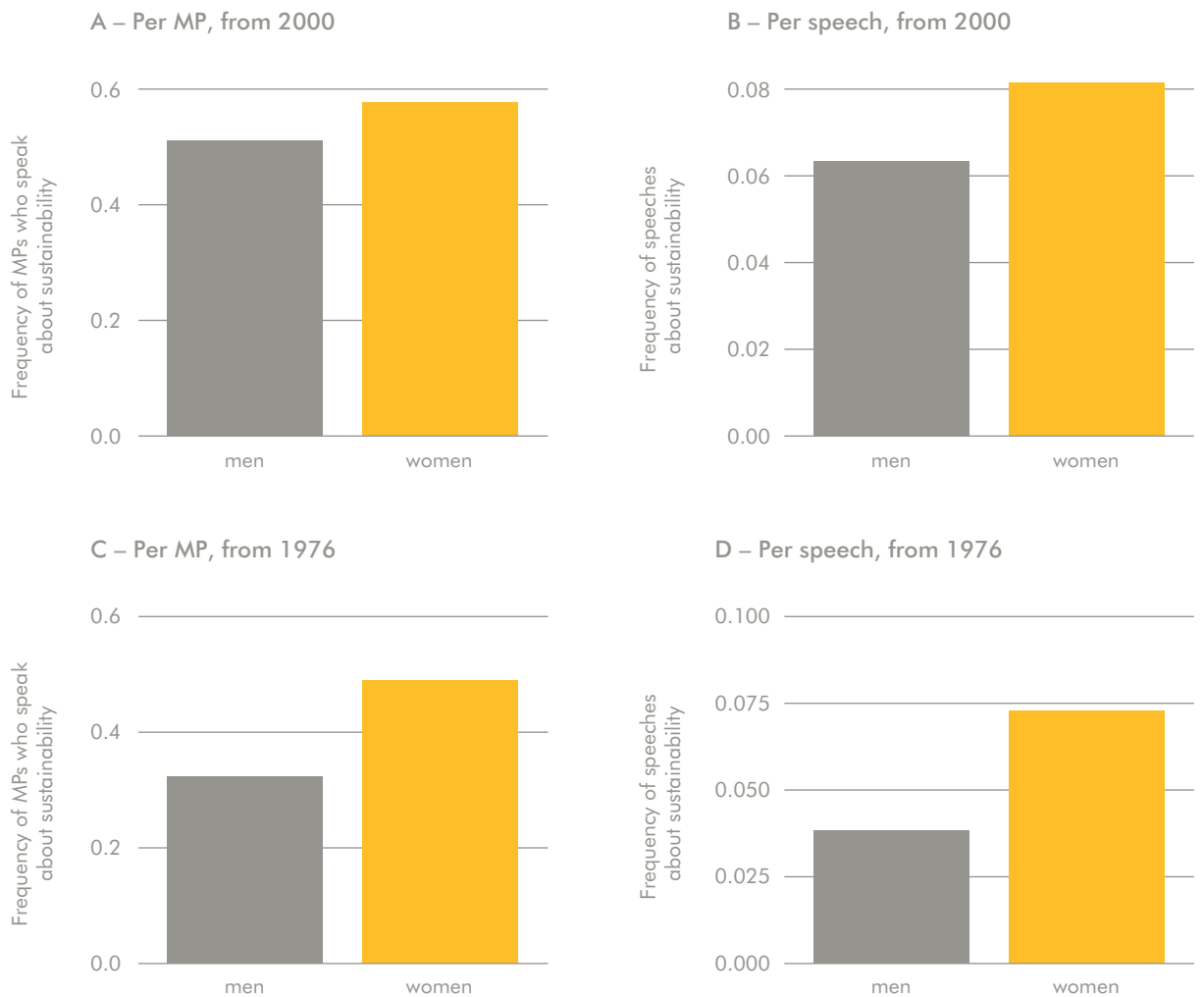
We also compare the age of the speakers when they speak about SDD, and when they deliver speeches in general (Figure 1.21); we find that although the median ages are not different (Kruskall-Wallis $p = 0.3$), the distributions are, χ^2, $p < 0.01$. There appears to be an excess of MPs around 50 years old speaking about SDD.

Figure 1.21.
Panel A – Distribution of age of speakers when they speak about SDD (blue) and in general speech (red). The median in the first case is 47 and in the second 46.3. **Panel B – Ratio of the frequencies of speakers between those who speak about SDD and speakers on general topics**. A ratio of 1 means that the frequency of speakers of that age is the same for the two distributions. A value above 1 indicates an excess of speakers that refer to SDD and below 1 indicates that there are proportionally fewer speakers of that age speaking about SDD. The grey box comprises the average +/- 2 standard deviations and the darker box represents the average +/- 1 standard deviation. The points outside the box are considered outliers
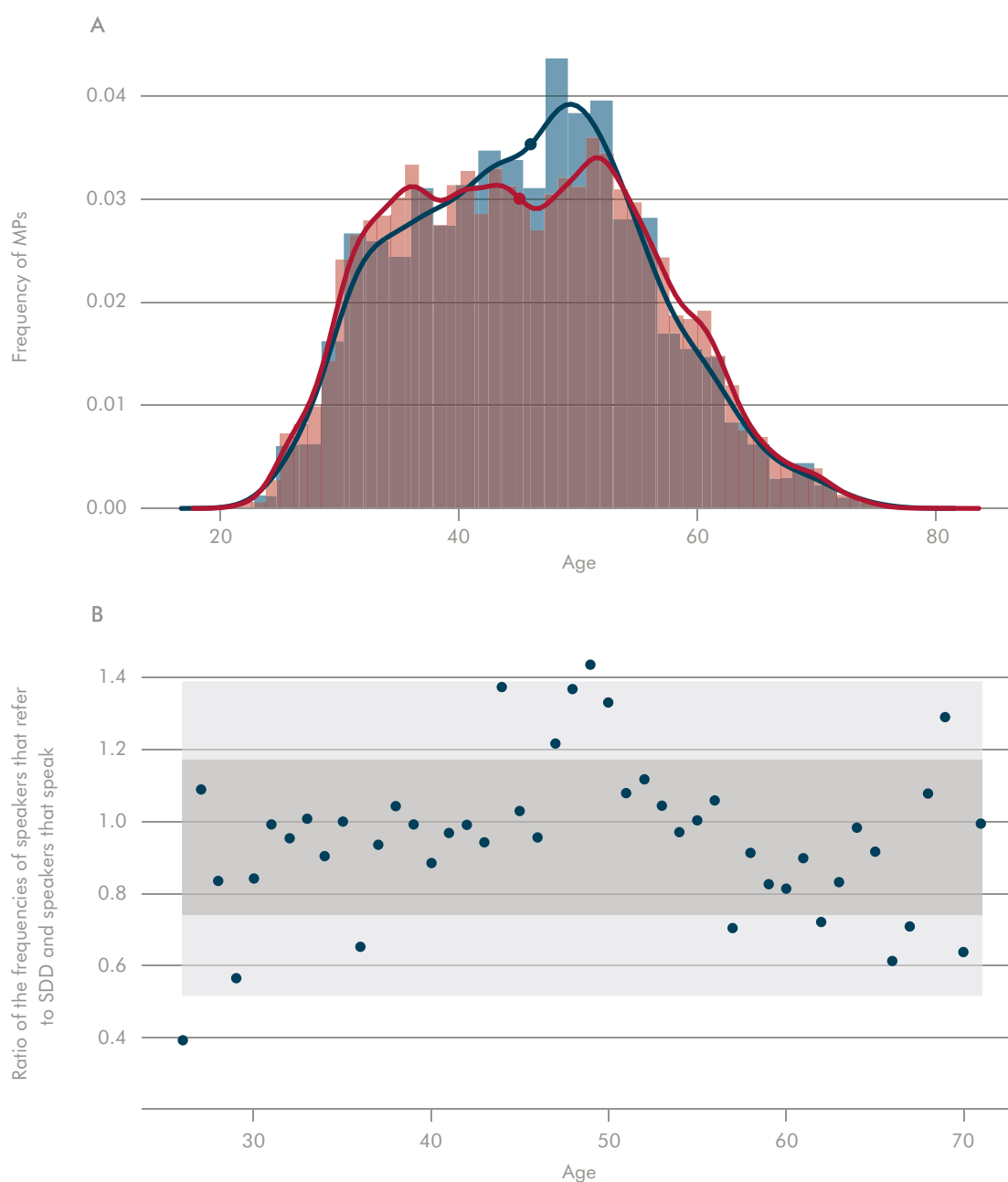
Given that no clear pattern was found in this analysis, we looked at the year of birth of the speakers. When we examine the distribution of the year of birth of speakers and of the speakers who refer to SDD, we find that the later the MPs were born, the greater the probability of their speaking about SDD. Figure 1.22 shows these data.

Figure 1.22.
Panel A – Distribution of years of birth of the speakers when they mention SDD (blue) and speakers in general (red). The median in the former is 1963 and in the latter 1965. **Panel B – Ratio of the frequencies of speakers who refer to SDD to speakers in general**. A ratio of 1 means that the frequency of speakers who were born in that year is the same for the two distributions. A ratio above 1 indicates an excess of speakers who refer to SDD and below 1 indicates that proportionally fewer speakers of that year of birth speak about SDD. The line represents the best regression line explaining the data. $R^2 = 0.46$ and the correlation is not significant (Spearman's correlation $\rho = 0.45$)
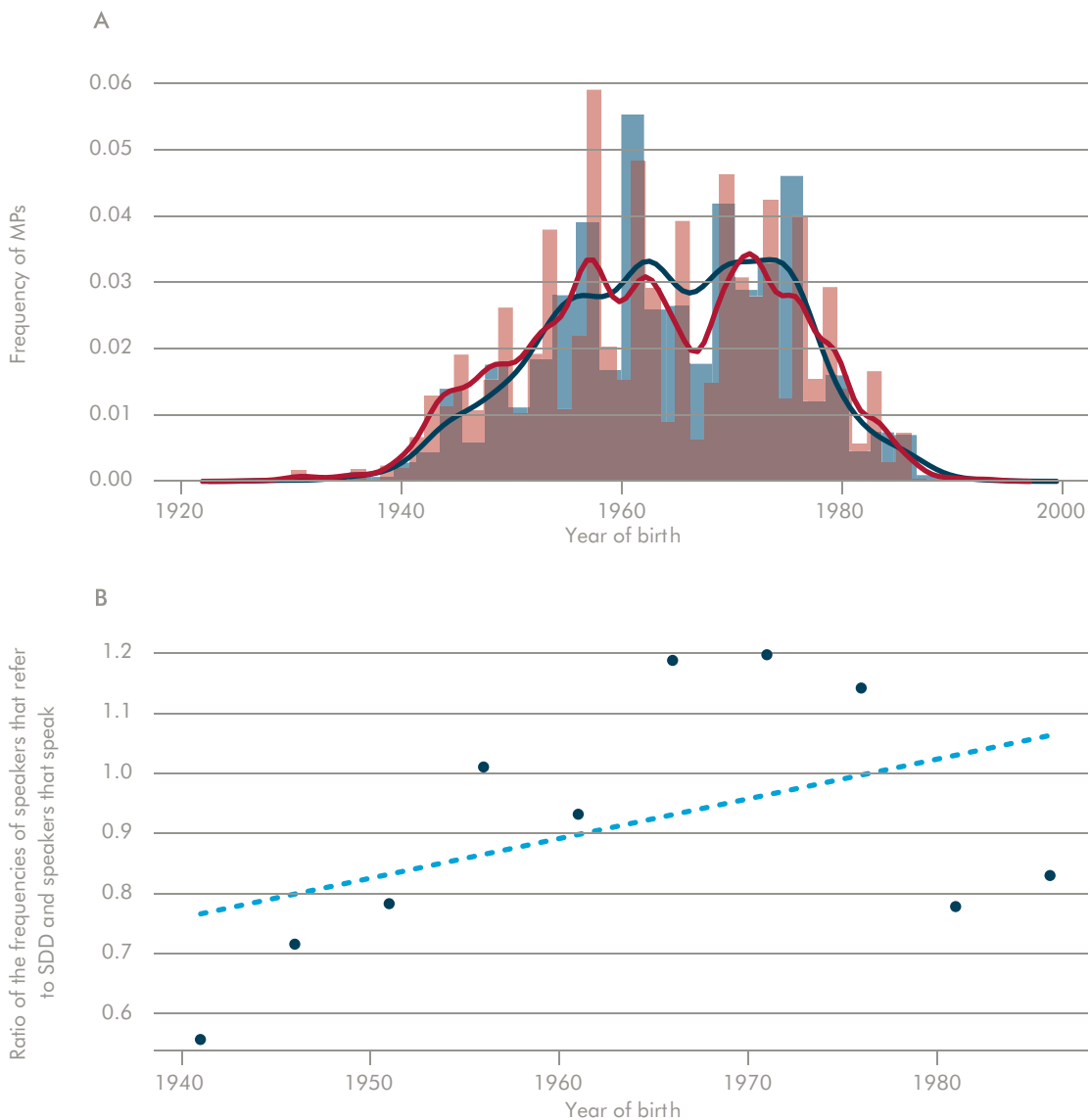
A

B

We performed a regression to obtain a better understanding of the interaction between the year of birth, gender and party; the results can be seen in Table 1.7. They suggest that both the year of birth and gender have an effect, that is, a speech on SDD is 0.553 more likely to be delivered by a woman; and this probability increases by 0.004 for each additional year in the date of birth. Differences are also found between the parties; as previously seen, speeches about SDD are less likely to be made by PCP and BE.

Next, we analyse the distributions of the number and frequency of speeches per speaker in more detail. Our aim is to identify who speaks most about SDD both in absolute and relative terms within each party. Figures 1.23A and B depict these two distributions, per party. The circles represent outliers, that is, the speakers who speak more than most of their colleagues on the bench, after restricting the analysis to those who delivered more than five speeches during their time in parliament. Table 1.8 shows the names of the speakers who stand out most from their parties for the frequency of speeches about SDD; the table in Appendix III shows the speakers who stand out most in absolute terms, that is, those with the largest number of speeches referring to SDD. Figure 1.24 shows the pattern of topics for four speakers, two of whom were members of government at the time (Vítor Gaspar and Pedro Passos Coelho). These data demonstrate that a speaker may refer to sustainability for very different reasons.

Table 1.7.
Logit regression of the frequency of speeches that refer to SDD

Characteristics of Speaker	Coefficient (standard error)
Year of birth	0.004* (0.002)
Female	0.21** (0.04)
BE	-1.9* (0.4)
CDS-PP	-1.6* (0.4)
PAN	-0.4 (0.5)
PCP	-2.2* (0.4)
PEV	-0.6 (0.4)
PS	-1.2* (0.4)
PSD	-1.3* (0.4)
Constant	-9 (3)

* $p < 0.05$; ** $p < 0.001$

The logit regression coefficients are log odds, that is they are interpreted as the logarithm of the probability of having, or not, a certain characteristic, for example, 0.21 is the logarithm of the ratio of the probability of a speech on IJ being made by a woman and the probability of it being made by a man.

Figure 1.23.
Distributions of the number (A) and frequency (B) of speeches about sustainability per speaker and per party. The red line represents the median and the box represents the values between the first and third quartiles. The whiskers represent the third quartile plus 1.5 times the difference between the first and third quartiles. The circles represent outliers that are located above the top of the whiskers
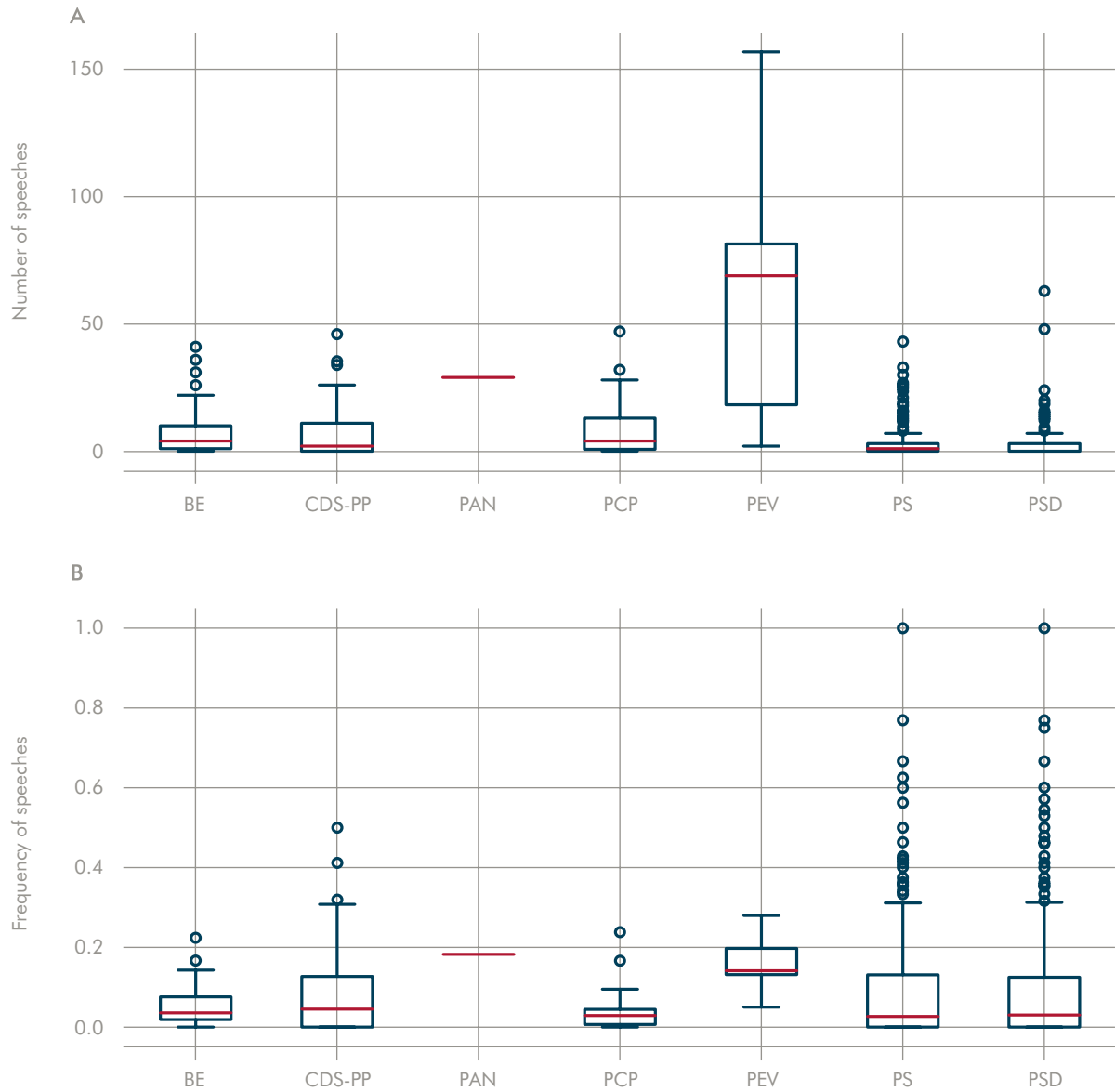
Table 1.8.
Speakers with a greater frequency of speeches about sustainability

Party	Name	Frequency of speeches
BE	Alda Maria Gonçalves Pereira Macedo	0.22
BE	Heitor Nuno Patrício de Sousa e Castro	0.17
CDS-PP	António Pedro Carvalho Morais Soares	0.41
CDS-PP	Maria Margarida Avelar Santos Nunes Marques Neto	0.32
PCP	Eugénio Óscar Garcia da Rosa	0.23
PCP	Joaquim Manuel da Fonseca Matias	0.17
PS	Francisco Jose Ferreira da Rocha	0.77
PS	Ana Maria Teodoro Jorge	0.62
PS	Francisco Nunes Correia	0.56
PS	Marcos Sá Rodrigues	0.50
PS	Mário Lino	0.50
PS	José Vieira da Silva	0.46
PS	João Fernando Brum de Azevedo e Castro	0.43
PS	Jovita de Fátima Romano Ladeira	0.42
PS	Teixeira dos Santos	0.41
PS	Hugo Miguel Carvalheiro dos Santos Costa	0.40
PS	Luís Capoulas Santos	0.37
PS	Luís Garcia Braga da Cruz	0.36
PS	Luís Vieira	0.36
PS	Jaime Silva	0.36
PS	Maria Helena dos Santos André	0.35
PS	Pedro Manuel Farmhouse Simões Alberto	0.34
PS	Ana Maria Ribeiro Gomes do Couto	0.33
PS	Alexandre Tiedtke Quintanilha	0.33
PS	Júlia Maria de Almeida Lima e Sequeira Rodrigues	0.33
PS	Domingos Ribeiro Pereira	0.33
PS	Rui Nobre Gonçalves	0.33
PS	Nuno Severiano Teixeira	0.33
PSD	Paulo Macedo	0.77
PSD	Isaltino Morais	0.57
PSD	António Fernando Couto dos Santos	0.545
PSD	Pedro Manuel Mamede Passos Coelho	0.53
PSD	Armando Sevinate Pinto	0.50
PSD	Miguel de Castro Neto	0.50
PSD	Jorge Manuel Lopes Moreira da Silva	0.48
PSD	Maria Luís Casanova Morgado Dias de Albuquerque	0.46
PSD	Vitor Gaspar	0.46
PSD	Paulo Simões Júlio	0.43
PSD	Álvaro Santos Pereira	0.41
PSD	Mário José Magalhães Ferreira	0.40
PSD	Laura Patrícia de Sousa Monteiro Magalhães	0.40
PSD	Fernando Ribeiro Marques	0.37
PSD	Odete Maria Loureiro da Silva	0.36

Table 1.8. (continuation)

PSD	Hélder Rosalino	0.35
PSD	António Bagão Félix	0.35
PSD	Hélder António Guerra de Sousa Silva	0.33
PSD	Sérgio Monteiro	0.33
PSD	Teresa de Jesus Costa Santos	0.32

Figure 1.24.

Distribution by topic of the speeches on sustainability made by two speakers and two members of government. It should be noted that the total number of speeches varies by speaker and that some speeches are classified under more than one topic

Vitor Gaspar – 11 speeches
Alda Macedo – 41 speeches
Pedro Passos Coelho – 63 speeches
António Morais Soares – 7 speeches
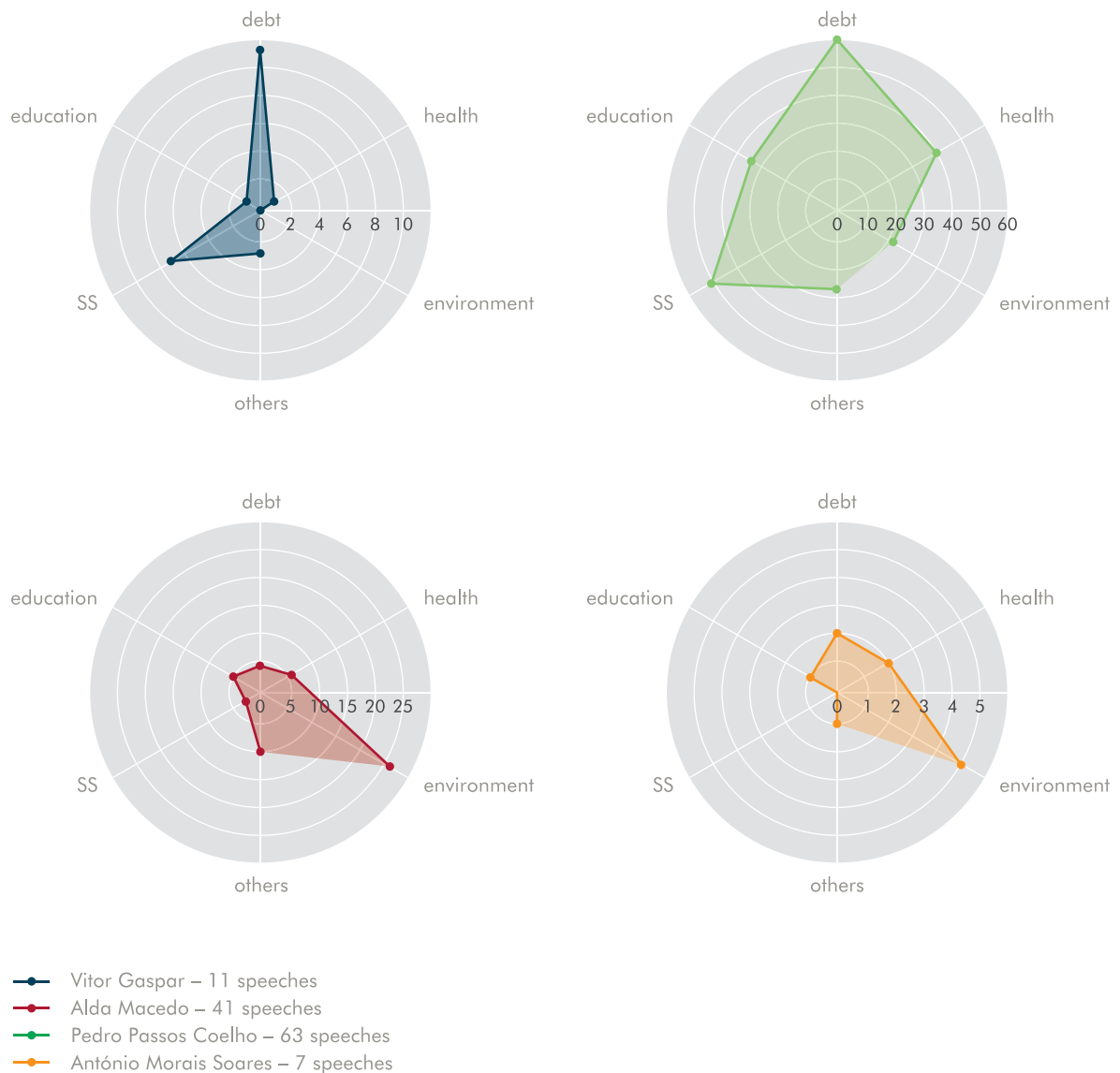
1.4.2. Analysis by topic: In which contexts is sustainability mentioned?

As described in the first section, the speeches were classified in six topics, based on keywords. To understand how these topics were distributed across the parties, the focus of our analysis turns again to the post 2000 period. Figure 1.25A shows the distribution per topic for each party and we note again that the same speech may be classified under more than one topic.

A χ^2 analysis shows that there are differences between the parties ($p < 0.001$) and we perform a principal component analysis (PCA) to understand where these differences originate. Figure 1.25B shows the two principal components that explain 87% and 7% of the variance, respectively.

Figure 1.25.
**A – Distribution of the speeches from each party per identified topic.
B – Principal component analysis of the frequency of speeches per topic and per party**

A – Distribution by topic per party

B – Principal component analysis (2)
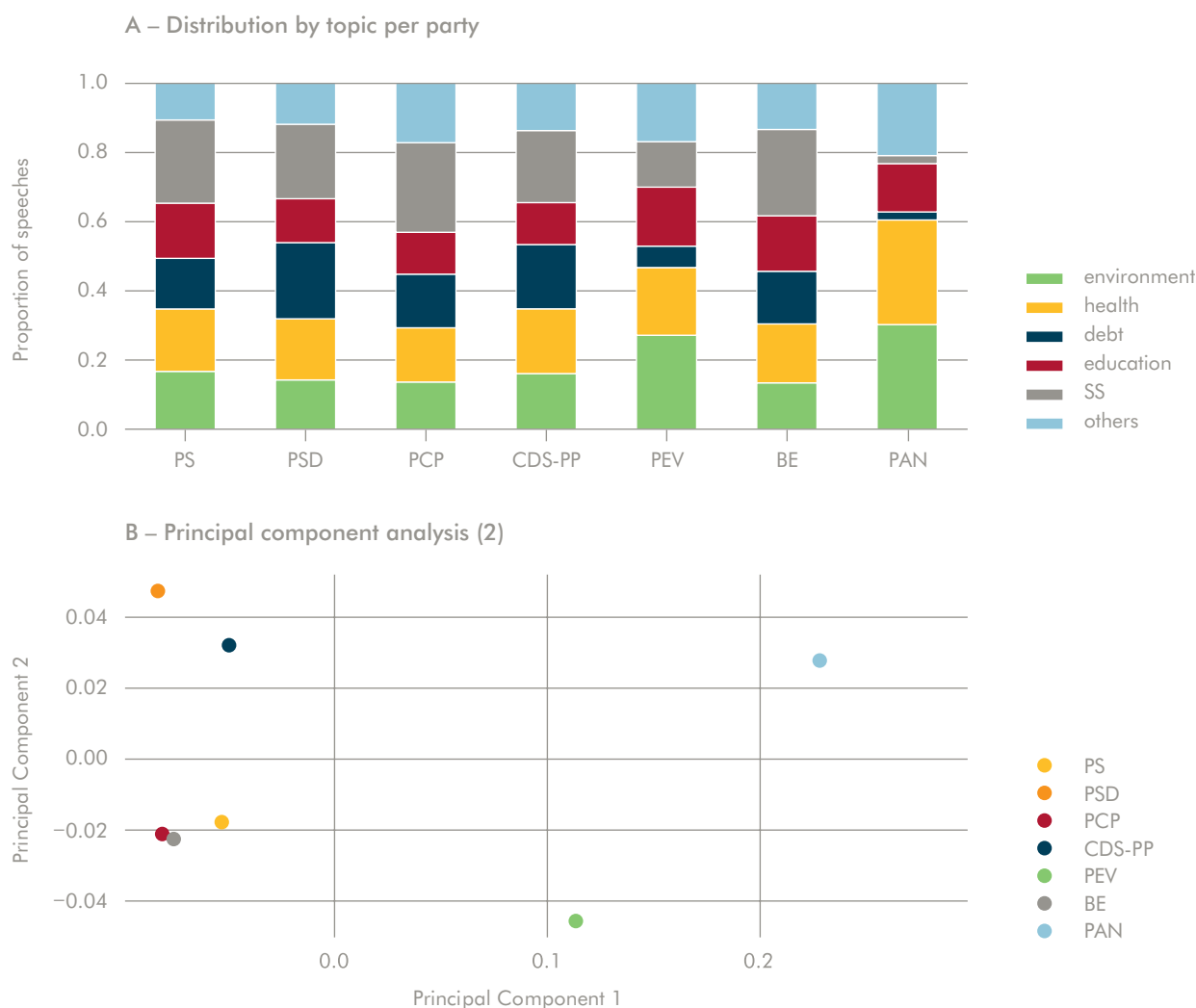
The first component separates PAN and PEV from the other parties, while the second separates the more right-wing parties from those more to the left. As described, understanding which characteristics contribute most to the separation into components is not trivial. However, each component can be correlated with each of the sub-topics. Therefore, we restricted the analysis to the first two principal components (these explain 94% of the differences between the parties) and Table 1.9 shows the values of these correlations. We can see that PAN and PEV stand out for talking more about SDD in the context of the environment and less in the contexts of debt and social security, while PSD and CDS speak more about SDD in the context of debt and less in the contexts of education and social security than the PS/PCP/BE. This is also visible in Figure 1.25A. Examples of some speeches by speakers from various parties are provided in Appendix II.

Table 1.9.
Correlation between the principal components and the topics

	environment	health	debt	education	SS	others
Principal Component 1	0.49	0.31	-0.48	0.035	-0.62	0.19
Principal Component 2	-0.24	0.32	0.57	-0.45	-0.54	-0.14

Sustainability in the context of each topic

In this section, we focus on the five sub-topics and ask how frequently sustainability is mentioned when debt or the environment, for example, are spoken about. We start by analysing the temporal dynamics of each of the five sub-topics, both within the topic of SDD and in general from the start of the Third Republic (1976) until July 2018. The graphs in Figure 1.26 show the number of speeches that include SDD (blue) and the total speeches for each topic or context (orange). The ratios between these two values for each topic are also represented. Although the number of speeches about SDD is low, as we have already seen, the trend seems to be growing in all the topics. This raises the following question: could the references to SDD be increasing simply because these five sub-topics (or contexts) are becoming more popular? As with IJ, given that the topics within SDD increased in a very correlated manner (Figure 1.27A) but that the correlation is much less in non SDD topics (Figure 1.27B), it is concluded that the increase in mentions of SDD has its own dynamics and is independent of the context in which it is placed.

As in the case of IJ, the environment and debt are the least correlated and this correlation becomes negative during the great recession (Figure 1.27A).

Figure 1.26.

Temporal dynamics of the selected topics both in the context of sustainability (blue) and in general (yellow). The graphs with only a blue line represent the ratio between the blue and orange values. In the latter, the overall average appears as text inside the respective panel
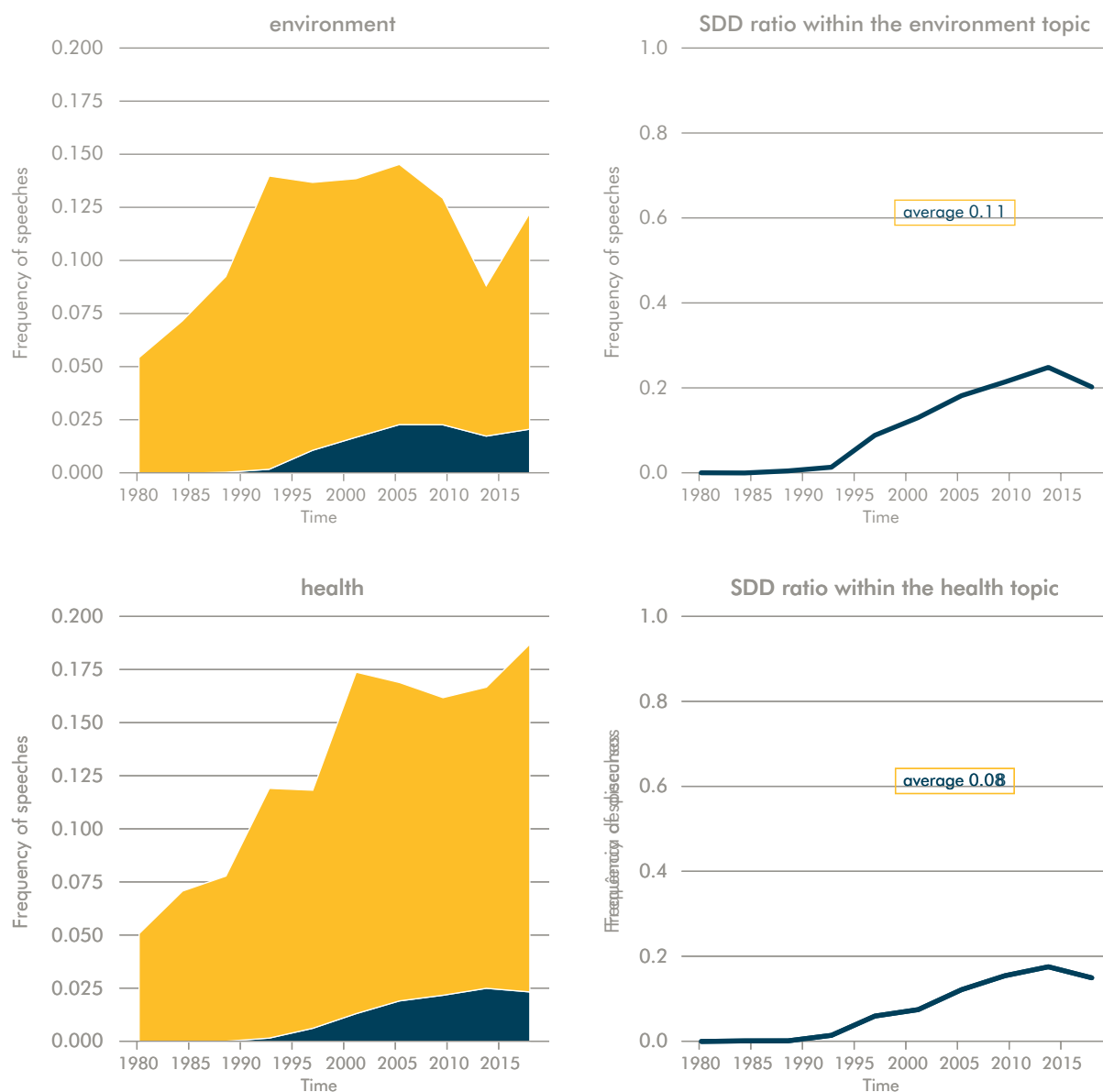
Figure 1.26. (continuation)

SS

SDD ratio within the SS topic

average 0.10

debt

SDD ratio within the debt topic

average 0.10

education

SDD ratio within the education topic

average 0.06
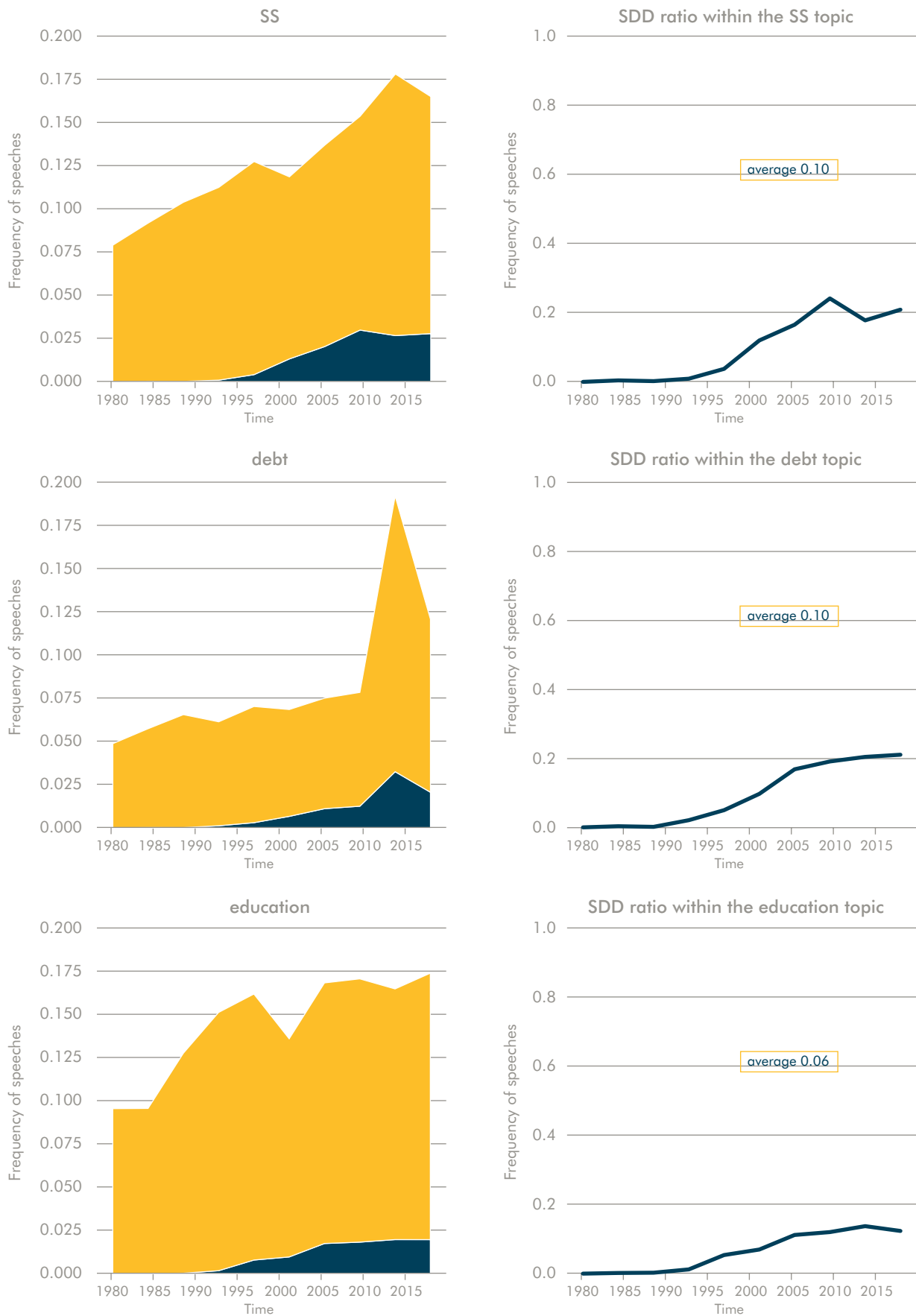
Figure 1.27.
Correlation between the frequencies of speeches on each topic, both within the SDD speeches (left) and in all the speeches (right)
Panels A and B show the Pearson correlation factors

A – Topics within SDD

B – Topics in general

environment — health — debt — education — SS

C – Correlation between topics within SDD

D – Correlation between topics in general
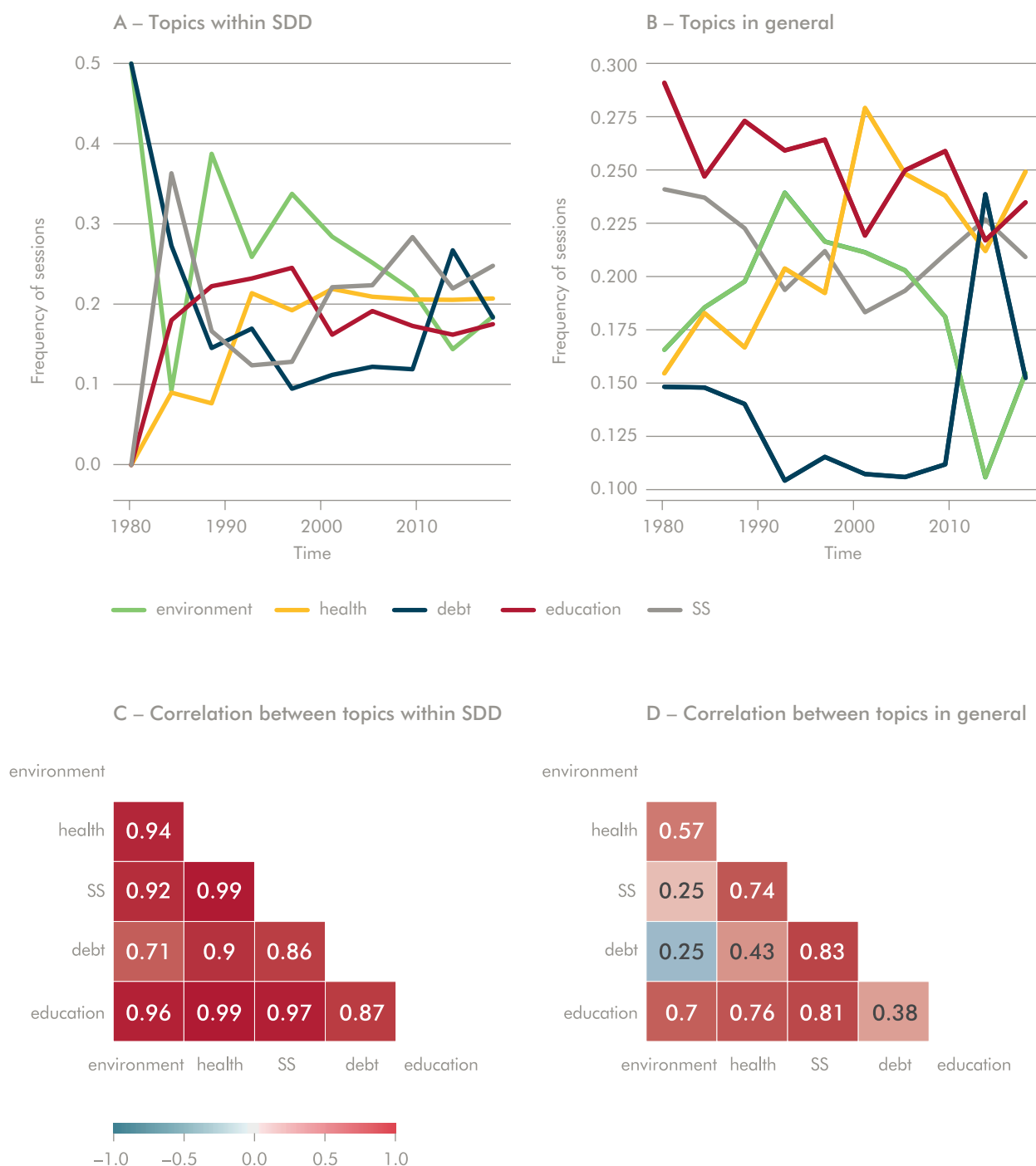
1.5.
PARLIAMENT – CRITICAL DISCUSSION

1.5.1. Content and keyword analysis

In contrast to our procedure with the news articles (Chapter 2), it is not possible to conduct a content or keyword analysis of the parliamentary speeches. If we did so, we would largely obtain words related to the typical institutional procedures such as "Speaker (President)", "MP", "vote", etc. On one hand, this is due to the fact that these terms must be used for reasons of protocol and, on the other, the language of debates is quite different from the Portuguese used in newspapers or in the day-to-day conversation of the population. We would have to eliminate all the most common words to make this type of analysis meaningful, and, while possible, it would make it too subjective. However, based on the previous semi-manual analysis and manual curation (see also appendices), it seems highly unlikely that adding terms or making a more computational analysis would reveal more topics or general topics that have not yet been described.

1.5.2. Conclusions – Political Discourse

The topics of intergenerational justice and sustainability have been raised increasingly in the parliamentary debates over recent years. Mentions of sustainability occur roughly 5 times more often than mentions of intergenerational justice, but both the topics present similar patterns. As in the case of IJ, SDD is highly associated with sub-topics such as debt, social security, education, health and the environment. There was a peak in the debate on SDD between 2010 and 2015, probably triggered by the financial crisis (Figure 1.9 and Figure 1.18), as debt was the sub-topic which increased most at that time (Figure 1.6 and Figure 1.7). One would expect a slight reduction to be observed but with a general upward trend if the economic recovery continued. In this case, it would be possible for the environment to again become the dominant topic; in fact, it was already showing signs of increasing until 2018 both in the context of SDD (Figure 1.6 and Figure 1.7) and in general (Figure 1.16 and Figure 1.26, last panel). In the case of IJ, the peak begins in 2005 and also ends when the crisis came to an end in 2015. It is not clear what triggered the increase in 2005 and, once again, it may have been caused by the increase in the speeches classified in the different sub-topics.

Turning to the party differences in the discussion of the topic: the greatest differences are seen in PCP and BE as they speak less frequently about sustainability than the other parties. In the case of PCP, this may be due to the coalition with PEV which concentrates greater interest in environmental sustainability, thus "freeing" the communist speakers to talk about other matters. The explanation is not so clear in the case of BE. Indeed, we cannot exclude the possibility that these parties make equal mention of sustainability but use terms that we have not taken into account; only an exhaustive reading of the debates would help us to identify these possible differences.

As for the speakers who stand out in their parties (Table 1.8), we identified several members of the government led by Pedro Passos Coelho. Yet again, this phenomenon could be due to the economic crisis during which this government was in office. On the other hand, more than one third of the speakers that most often mention IJ has held a government post at some time, both in Governments led by PS and PSD; this is a great over-representation vis-à-vis the 8% of MPs that were in Government at some time. This could indicate that IJ is a more present issue for MGs than for MPs in general and may justify a more detailed analysis.

In the analysis by topic, we see a strong separation between parties, with PEV and PAN standing out for speaking more about the environment and health and less about debt and social security. Here again, this observation could be due to the particularities of these two parties. On the other hand, we can also see a clear distinction (albeit less marked) between the left and right-wing parties, with CDS-PP and PSD speaking more about debt and health, and less about education and social security.

These observations may be relevant in different contexts and help in the definition of strategies for coordinated actions in Parliament. It would also be fruitful to compare these results with those obtained in the survey of parliamentarians.

In short, political discourse, at least in the plenary debates in Parliament, has made increasing reference to SDD and IJ, particularly in the contexts of the environment, social security (SS) and debt. The following sections strive to understand whether this effect is also visible outside Parliament, notably in the press and in social networks.

2.

ONLINE WRITTEN PRESS

In this chapter, we analyse the presence of IJ and SDD topics in three major national newspapers with a strong online presence. Section 2.1 explains why we selected these newspapers, and sections 2.2 and 2.3 analyse the presence of IJ and SDD, respectively, in the press. Each section includes a temporal analysis, a topic (or context) analysis, and content analysis.

2.1.
SELECTION OF NEWSPAPERS, NEWS, AND BREAKDOWN BY TOPIC

From the universe of Portuguese general online newspapers, we selected the three newspapers listed with the highest number of views (https://www.marktest.com/wap/a/n/id~1c4c.aspx): Público (www.publico.pt), Expresso (www.expresso.pt) and Correio da Manhã (CM, www.cmjornal.pt). Our analysis focused on the period from January 2007 to December 2018. It should be noted that the period of analysis for the newspapers is shorter than that of the Parliament due to the lack of data available for previous years. Data for Expresso is only available from 2007.

The news articles from each of the three newspapers were extracted using the newspapers' own search engines. It is therefore assumed that the extraction covers as many news articles as possible. For consistency purposes, we applied the same criteria to collect news as used in the analysis of Parliament: we began by filtering news with the keywords *intergenerational, coming generations, and future generations* to define the **Intergenerational (IJ)** dataset. Note that these three keywords were used because reference is seldom made to the term *Intergenerational justice* in the Portuguese media. However, in light of the small number of results obtained, we decided to extend our search using the keyword *sustainability* to establish the **Sustainability (SDD)** dataset. The keywords were searched in the headline, the lead and body of the news articles. These two subjects are analysed separately in the following sections.

2.2.
ONLINE NEWSPAPERS – INTERGENERATIONAL JUSTICE

2.2.1. Temporal analysis: How does news on Intergenerational Justice vary over time?

Figure 2.1.

Volume of news items per quarter per newspaper (left) and total news items per newspaper (right). Público is in dark red, Expresso in blue, and CM in yellow
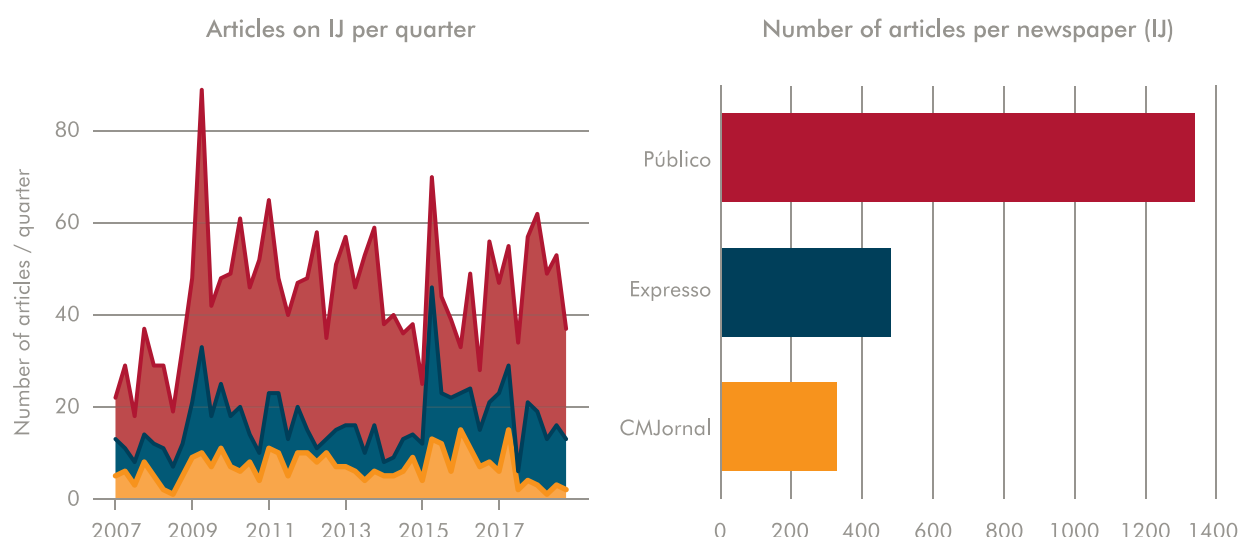
We collected a total of 2148 articles from the IJ dataset. Over the period under analysis, the volume of news items varied between the three newspapers: overall, Público published more articles (1340) than Expresso (480) and Correio da Manhã (328) (Figure 2.1). On average, and per quarter, Público published approximately 28 articles, Expresso 10, and CM 7, albeit with a significant quarterly variation. In the first quarter of 2009, there was a peak in the number of articles published in Público and Expresso, but not in CM. This was followed by another notable high point in the Expresso in the first quarter of 2015, but it was not accompanied by the other two newspapers. In general, the correlations between the time series of the three newspapers are low and not significant (between Público and CM, ρ=0.0004, between Público and Expresso ρ=0.18 and between Expresso and CM ρ =0.22, using the Spearman method at all times).

To understand whether Público does indeed publish more on the subject than the other newspapers, we needed a general count of the number of articles published. The scraping method used to obtain these articles cannot be applied to this kind of analysis because it does not provide the total number of articles. We therefore resorted to Media Cloud (https://mediacloud.org/),

through which data from several newspapers can be obtained. This platform only has information from 2013 onwards and there are a few flaws in the first years (for example, there are no records for Correio da Manhã regarding 2014). Thus, we decided to count all articles published by each newspaper in 2017 and 2018 with the following results: 68,784 in Público, 50,867 in Expresso and 104,773 in Correio da Manhã. Assuming that the relative number of articles remains stable from 2007 to 2018, we calculated the rate of articles that refer to intergenerational justice for each newspaper to be 0.33% for Público, 0.16% for Expresso, and 0.05% for Correio da Manhã.

2.2.2. Analysis by topic: in which contexts is Intergenerational Justice mentioned?

Categories of articles

Figure 2.2.

Top 10 from the count of categories with news items extracted from newspapers, within the articles classified under IJ. The categories were extracted from each article's link (URL), which vary depending on the newspaper. In the case of Público, the URL provides two types of classification: the type of article and the topic. Most articles include only the type of article and not the topic. In the case of CM, the topic of the articles is also not provided for the categories 'cm-ao-minuto', 'exclusivos' and 'tv-media'
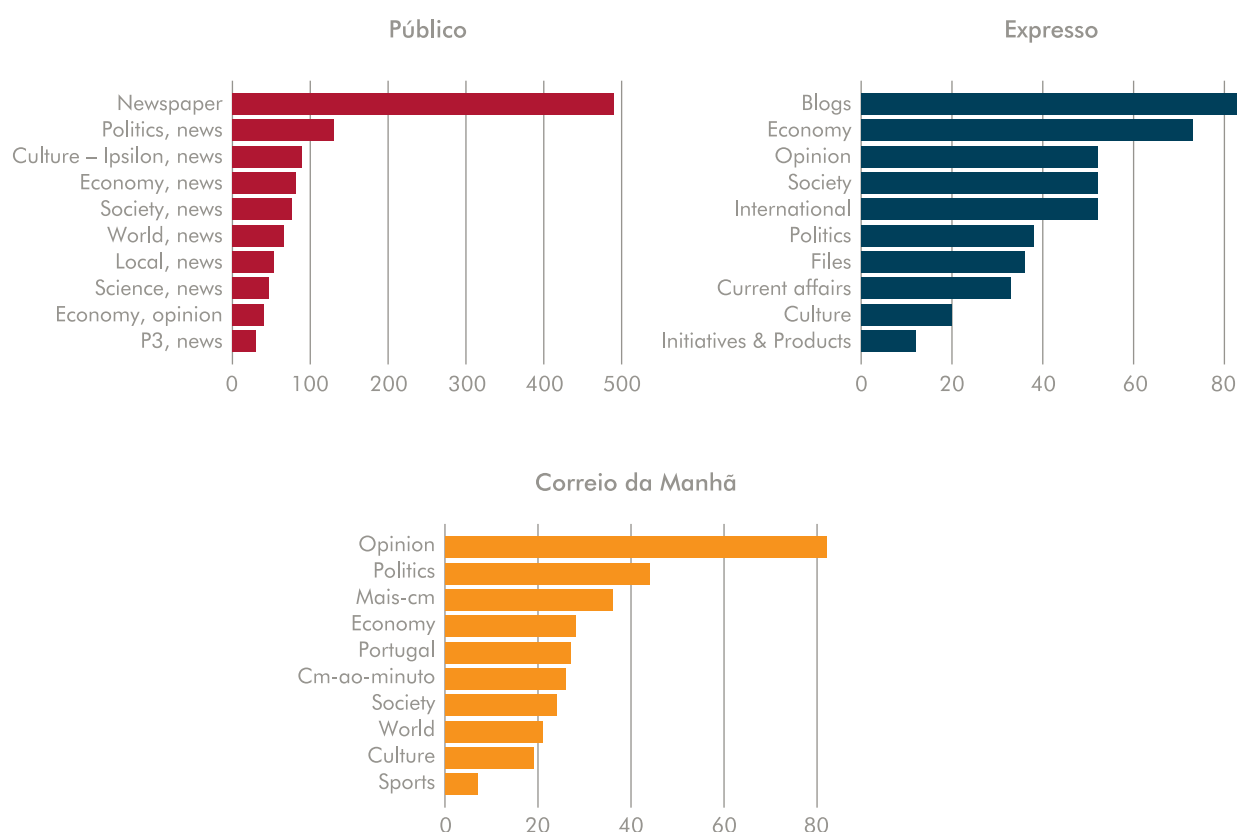
The three newspapers indicate which category the article belongs to. During the automatic extraction of articles, we chose to retrieve this information directly from the links (for example, the article 'cmjornal.pt/**portugal**/detalhe/57-jovens-fazem-censo-de-idosos' [...detail/57-youths-carry-out-census-of-the-elderly] belongs to the category 'portugal' in CM). However, it is worth noting that there is considerable heterogeneity in the categories for the different newspapers. Público, for example, has two categories for some articles: one informing about the type of article and the other indicating the topic. Figure 2.2 shows that the prevailing categories in the three newspapers are Economy, Society and Politics and, in the case of CM and Expresso there is a large number of opinion pieces. Therefore, we (automatically) extracted the articles identified as opinion pieces, and Appendix IV shows the columnists that mention IJ in at least two of their pieces. It is important to note that some authors write much more than others and, therefore, these absolute numbers are in no way indicative of the frequency or relevance given to the subject. Nevertheless, it is important for future work to identify the authors that pay more attention to this topic. It is also noted that the method used does not allow us to infer the topic of the articles in either CM's 'cm-ao-minuto' category, or Público's 'jornal' [newspaper] category.

To glean a better understanding of the context of the IJ discussion in the Portuguese media, we considered an analysis similar to that used for parliament, where we established 6 categories for inclusion depending on whether or not the keywords are present (Table 1.1). This allowed us to classify 70% (1508) of the articles, classified under the following sub-topics: 28% under environment, 25% under education, 19% under social security, 14% under debt, 10% under health, and 5% classified as 'others' (Figure 2.3). The attention given by the media to the environment topic was initially quite high but declined between 2011 and 2015, before increasing yet again from 2015. The temporal dynamics for 'debt' and 'social security' show an inverse pattern from that of the environment, with initially low numbers that then rise during the crisis years before declining again after 2015-2016 (Figure 2.3). In fact, the temporal trend of articles on the 'environment' is negatively correlated with 'debt' ($\rho = -0.9$, $p < 0.001$). This is similar to what was observed in the study of the parliamentary debates, which is why we felt the need to try to understand the overlapping of these topics with references to national politics.

To continue the comparison with Parliament, we calculated the proportion of articles within each topic that include the keywords connected with parliamentary politics, such as "National Assembly", for example, and references to political parties. It is interesting to note that most articles on debt, social security, health, and others are associated with parliamentary politics. However, this is not the case with articles included in the 'environment' sub-topic (Figure 2.3, shaded area).

Given that a substantial proportion of the articles classified are associated with parliamentary politics, we tried to understand the co-occurrence of articles on each topic with references to political parties. As with the inclusion criteria for the topics, we only considered an article to be related to a political party if reference is made to that party (either its acronym or in full) at least twice in the article. Note that each article may have references to more than one political party.

Figure 2.3.
**Distribution of the articles per subject over time (left) and total (right)
based on the keywords defined in Table 1.1.** In the left-hand graphs, the shaded
colour represents the proportion of articles that include words/expressions linked
to politics (Parliament [*Assembleia da República*], government, ministers, political
parties, and so on)

Articles per category, standardised by the total number of articles
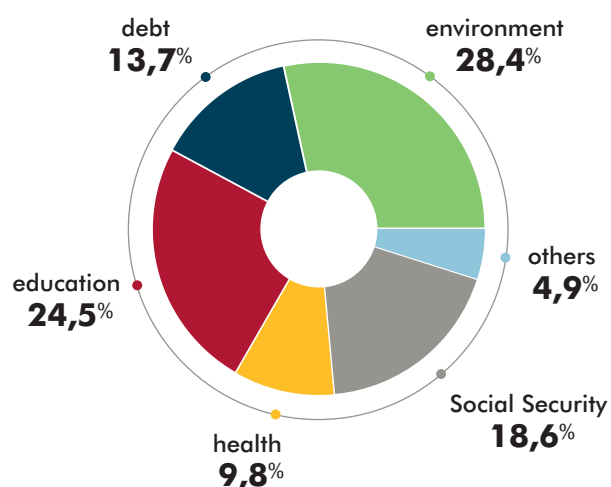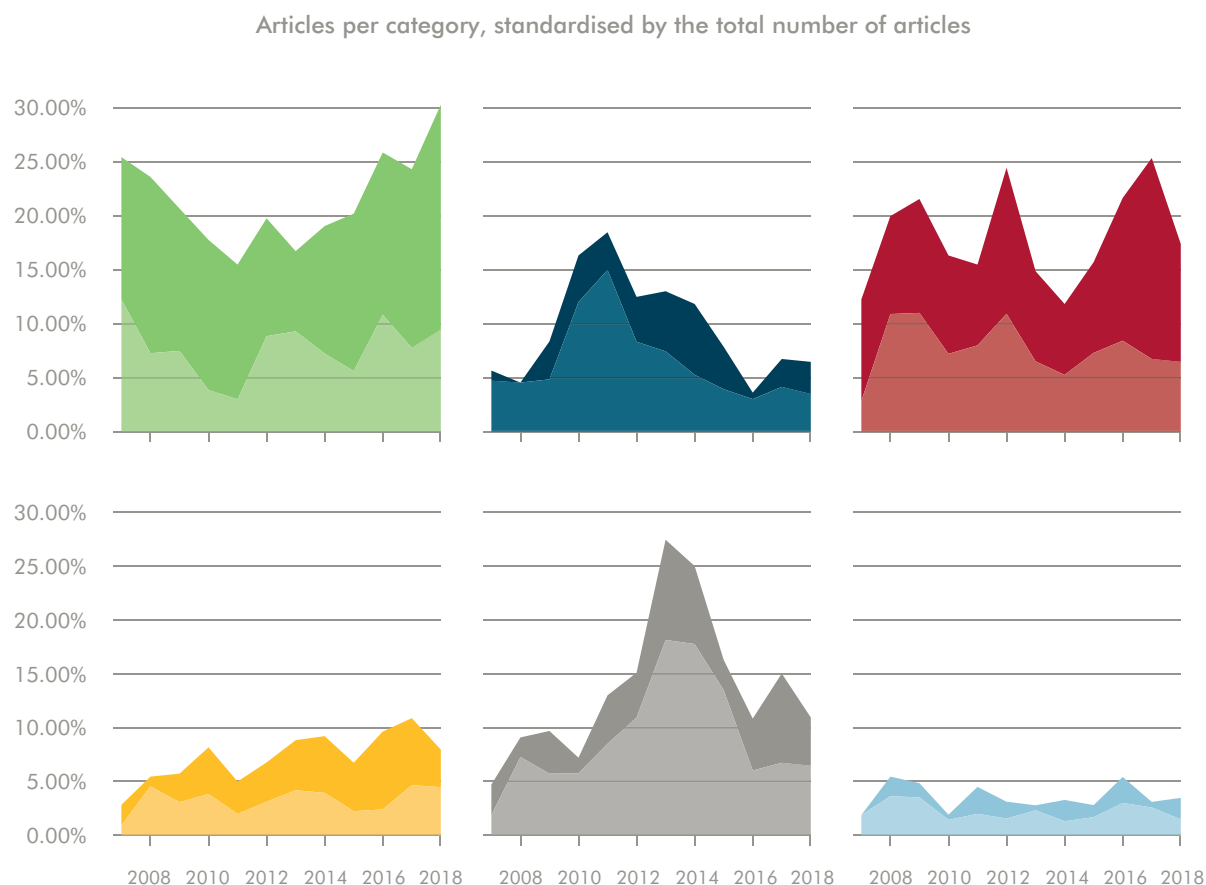
Figure 2.4.

Temporal dynamics (per year) of the news items of the aggregated dataset, per topic and per political party. The data have been standardised by the total articles per year
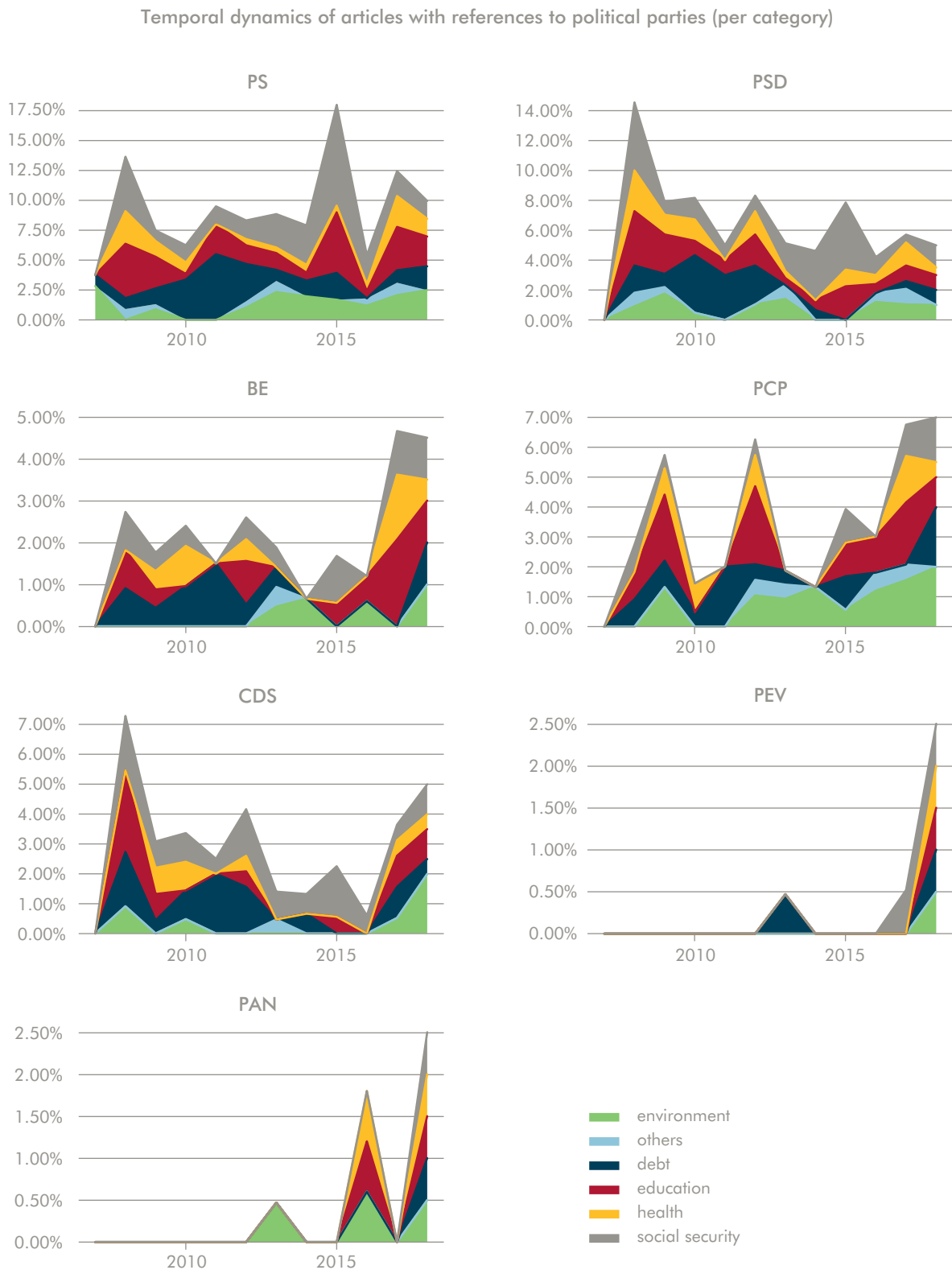
Figure 2.4 validates the question of the low politisation of articles on the environment (in green); despite being the topic with the most publications, it is generally the subject with the smallest number of references to political parties. Social security (in purple) seems to be the most common topic, followed by education (red) and debt (blue).

The PS was classified as the party with the most IJ mentions in the articles extracted. The volume of articles associated with the PS remained relatively steady over time, with the exception of the evident peak in 2015, mainly linked to Social Security. This peak, also observed in the case of the PSD and the CDS, refers to the peak in IJ-related articles in the first quarter of 2015 (see Figure 2.1), notably in May 2015, when the PSD and CDS coalition was still in office. It should be noted that references to the BE, the PCP-PEV and the PAN were not significant during this peak in 2015. However, since the 2015 elections, mention of these parties in articles regarding SDD and IJ has risen steadily, in fact, by as much as four times in the case of the BE when compared to the "pre-Geringonça[1] period. The following article headlines illustrate the political debate:

> PSD asks for 'consensus' and 'composure' for the sustainability of social security (*in Público, 26-05-2015*)

> Costa accuses coalition of 'lack of courage' in the attempt to find a solution for social security (*in Público, 30-05-2015*)

> António Costa will not yield on the cut in TSU [Single Tax] for workers (*in Expresso, 28-05-2015*)

We calculated the proportion of each topic per party to understand how the topics are distributed among the political parties. Figure 2.5A shows the differences between the parties (not significant, χ^2 analysis, $p > 0.05$). We conducted a principal component analysis (PCA) with the frequency of the topics per party for a more detailed understanding of the differences. The first two main components explain 79% and 11% of the data, respectively. The first component has a positive correlation with the environment and a negative one with the SS, while the second component is mostly (inversely) associated with the sub-topic of education (Table 2.1).

It can be seen that the first component separates PAN and PCP from the remaining parties, and the second component separates PEV, CDS, and the other three parties. This may indicate that the articles that mention PAN and PCP are more associated to the environment and less to social security, and that the articles that refer to PEV are less associated to education. This result is slightly different to that observed for parliament and for SDD (further below in this report). This may be due to the small number of articles on IJ, or to a difference in how the parties are mentioned in newspapers within the IJ context.

———

[1] T.N. 'Geringonça' – which in English roughly translates as "contraption" – was coined by a conservative critic to ridicule the coalition cobbled together in late 2015 by Costa and two parties on the hard left. (taken from: https://www.politico.eu/article/antonio-costa-ps-socialists-european-left-wants-piece-of-portugal-contraption/)

Figure 2.5.
A – Distribution of the articles with identified topic with references to each party. B – Analysis of the main components with regard to the frequency of the articles per topic and per party
See Table 2.1. to interpret the main components 1 and 2

A – Topic distribution per party

B – Principal component analysis

Table 2.1.
Correlation between principal component 1 (PC1) and principal component 2 (PC2) with each topic. A high correlation (positive or negative) means that a topic is of importance in that component

	environment	debt	education	health	SS	others
Main Component 1	0.633	-0.39	0.17	0.21	-0.621	-0.014
Main Component 2	0.41	0.082	-0.71	0.30	0.29	-0.37

2.2.3. Analysis of the content of the articles

It is not easy to analyse the content of each article given that we are dealing with thousands of articles. However, there are text analysis methods that provide a general idea of the content of these articles. We therefore decided to calculate the number of words in the articles after filtering out the non-informative words ('stop words'), articles (the, of), accents, numbers, and others.

Word count in headlines, leads and body of the articles

The headline, lead, and body of the articles differ in the amount of information each provides. Therefore, for this analysis, we decided to do the wordcount separately in each of the three segments that form the article.

Figure 2.6.
**Top 15 words in the headline, lead and body of the IJ dataset,
and respective word count**
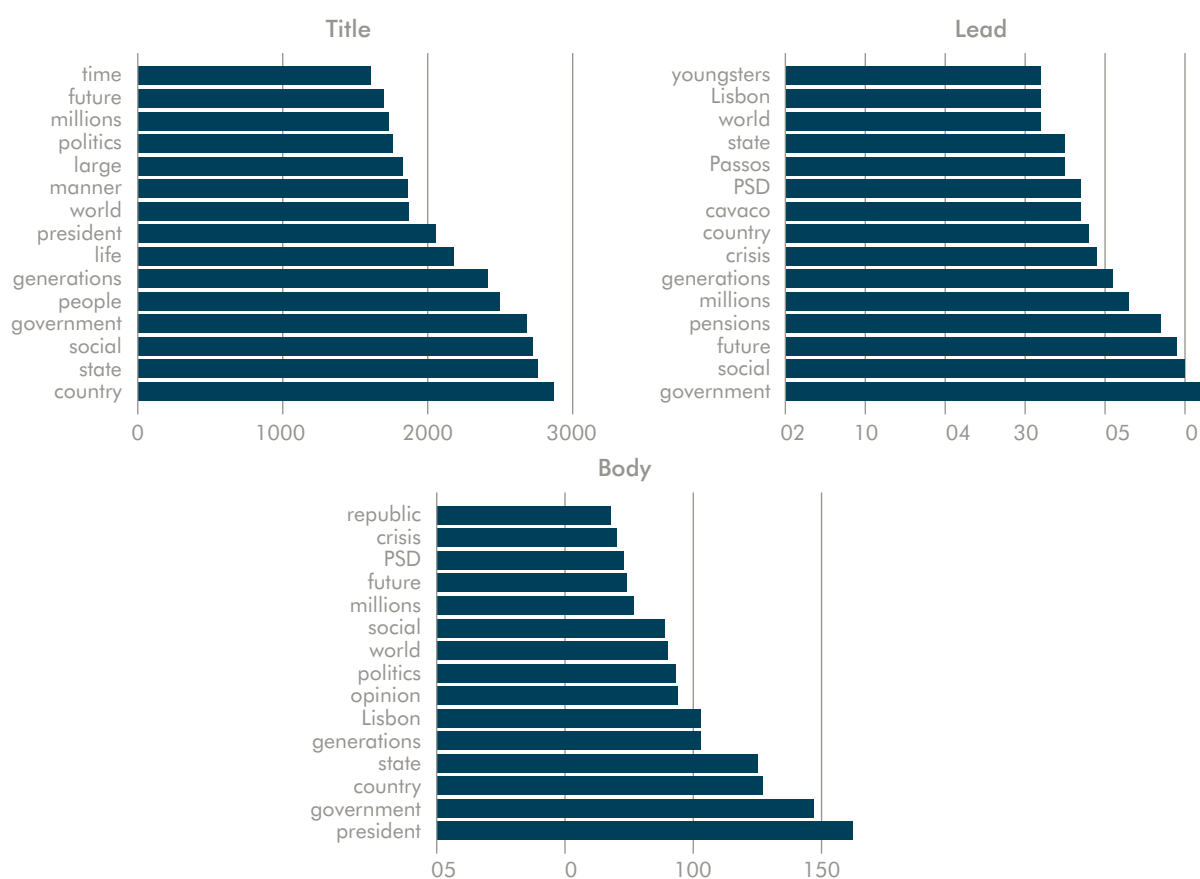
Figure 2.6 shows that there is a prevalence of terms associated with politics, the economy and pensions, not only in the headline but also in the lead and body of the articles. In terms of political figures, there are references to Passos Coelho, Cavaco Silva, and to PSD. Note here that Público has not adopted the Portuguese spelling reform (1990) unlike CM and Expresso, which raises some ambiguity in the count of same words. Nevertheless, this should not significantly alter the graphs presented since this choice of spelling does not affect any of the main terms used in either the research or the classifications.

We thus repeated the same analysis for each newspaper and each year to obtain an idea of the temporal dynamics of the content of the articles. Figures 2.7, 2.8 and 2.9 show the word count per year for the *headline*, *lead*, and *body* of the articles, respectively.

Figura 2.7.

Top 15 words in the *headlines* of the news articles classified under IJ per year, and respective word count

Word count in news article headlines per year

2007
appeal, waters, generations, humans, hunting, sócrates, work, portuguese, country, war, millions, debate, ota, silva, cavaco

2008
carbon, ostrich, israel, jardim, woman, youths, cinema, madeira, defence, crisis, portuguese, sócrates, generations, government, politics

2009
taxes, safety, lacking, fear, school, european, milk, tgv, paulo, april, country, 25, rangel, ps, psd

2010
budget, Saramago, bride, rangel, youngsters, future, government, indebtedness, director, letters, madeira, crisis, state, lisbon, paulo

2011
protest, passos, jsd, director, debt, court, letters, euros, Cavaco, social, madeira, crisis, rasca[2], generation, millions

2012
constitution, debate, Europe, silva, destruction, social, petition, psd, 20, Cavaco, rio, politics, future, crisis, passos

2013
cavaco, president, Lisbon, court, mandela, europe, constitutional, future, government, generations, state, passos, country, social, pensions

2014
future, justice, crisis, ps, Europe, security, altice, social, sustainability, passos, portas, pt, pensions, (old age) pension, govenment

2015
greece, youths, tap, death, agreement, future, coalition, passos, state, pensions, war, life, social, generations, costa

2016
oil, end, house, discourse, purpose, costa, millions, technology, life, president, national, future, world, marcelo, social

2017
elderly, (old age) pension, house, europe, youths, soares, agreement, pensions, future, planet, debt, trump, social, costa, lisbon

2018
costa, town council, letters, youths, music, people, pensions, rio, babies, millions, generations, lisbon, elderly, government, future

2 T.N 'rasca' as in 'geração rasca' describes a struggling generation due to economic crisis.

Figure 2.8.
**Top 15 words in the news *leads* classified under IJ per year,
and respective word count**

Word count in news leads per year
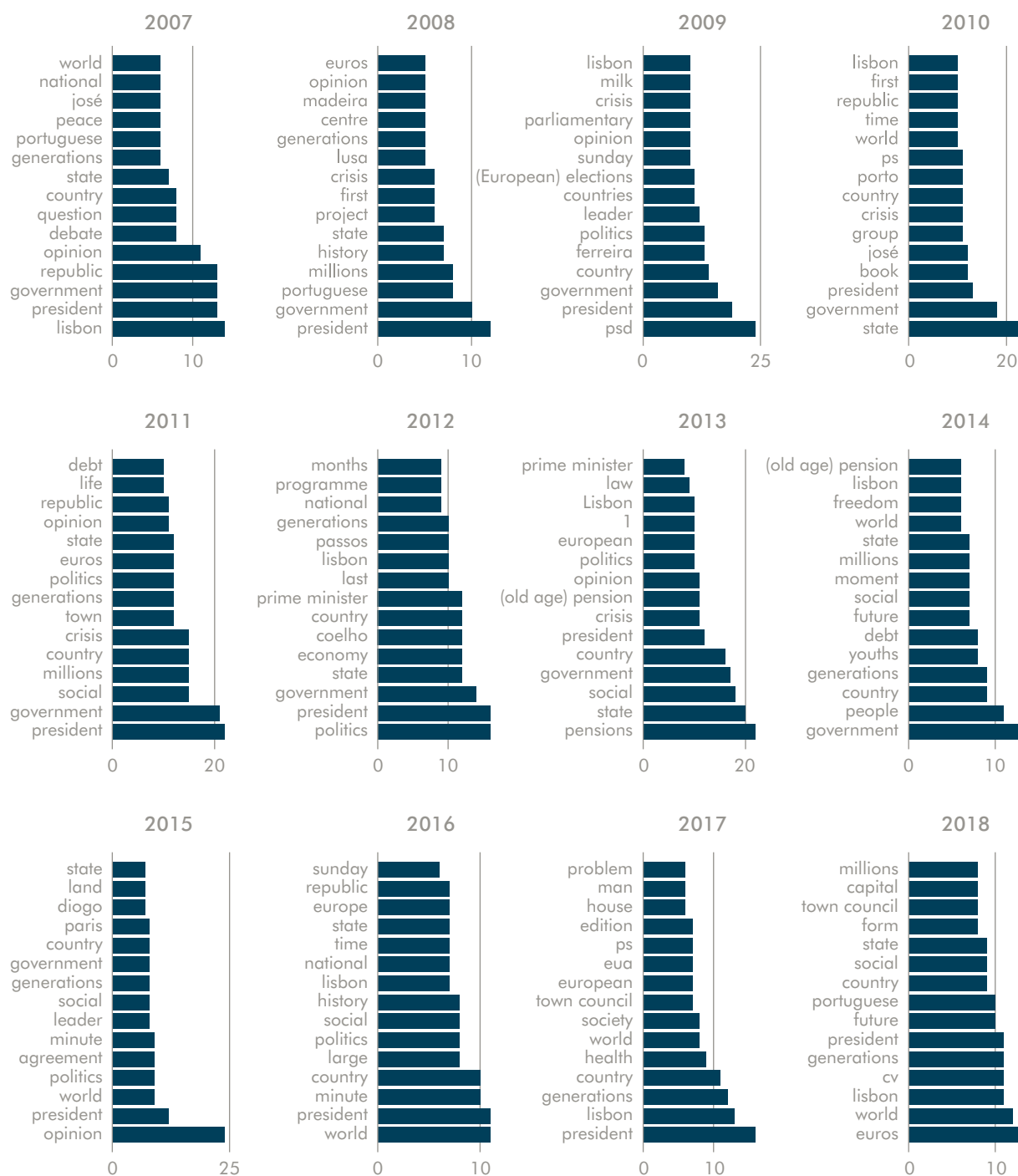
Figure 2.9.
Top 15 words in the *body* of news articles classified under IJ per year, and respective word count

Word count in the body of the news articles per year

2007
town
people
countries
war
state
country
large
government
european
life
world
generations
lisbon
europe
president

0 — 100

2008
development
large
president
world
politics
part
social
form
generations
millions
people
life
country
state
government

0 — 100

2009
psd
form
large
time
life
people
economy
social
companies
generations
politics
state
crisis
government
country

0 — 250

2010
time
politics
book
crisis
form
life
world
millions
large
social
generations
people
government
country
state

0 — 250

2011
work
public
form
world
president
life
future
euros
people
generations
social
millions
state
country
government

0 — 250

2012
works
politics
life
europe
work
president
countries
crisis
future
generations
people
state
government
country
social

0 — 250

2013
form
world
life
europe
mandela
system
president
people
politics
country
generations
pensions
government
state
social

0 — 250

2014
form
future
(old age) pension
large
part
system
millions
life
work
state
government
country
people
generations
social

0 — 250

2015
olive (tree)
countries
future
greater
form
large
life
system
state
president
generations
government
social
people
country

0 — 250

2016
politics
form
generations
national
large
government
santos
state
people
social
world
millions
life
country
president

0 — 250

2017
large
part
europe
time
form
countries
work
house
world
country
president
life
generations
people
social

0 — 250

2018
work
e-mail
system
time
world
large
government
social
future
state
form
generations
life
country
people

0 — 250

The words **government**, **millions**, and **pensions** continue to be extremely prevalent, year after year, in headlines as well as in the leads and body of the articles, which indicates that a substantial set of the articles extracted is linked to politics, economy, and social security. In 2009, words such as **crisis** and **fear** emerged and, in more recent years, words such as **USA** and **Trump**, clearly associated with the United States.

Word counts of words *neighbouring* the key words

The word count in the headline, lead and body of the articles is, in fact, a very broad analysis. As we wanted a more precise understanding of the words that co-occur with IJ topics, we decided to extract the 4 words to the right and to the left of the key words: *generation*, *generations*, and *intergenerational*. Figure 2.10 shows that there is a general co-occurrence of the words *inter-generational* and *generations* with the words **solidarity** and **future.**

Figure 2.10.

Top 15 words *neighbouring* 'intergenerational' and 'generations' (considering -4 to +4 *neighbouring* words) per year (SDD + IJ), and respective word count

Word count of words *neighbouring* 'generation', 'generations', and 'intergenerational''

2 T.N 'rasca' as in 'geração rasca' describes a struggling generation due to economic crisis.

2.3.
ONLINE NEWSPAPERS – SUSTAINABILITY

2.3.1. Temporal Analysis: How does news on Sustainability vary over time?

Figure 2.11.

Volume of news items per newspaper (left) and total news items per newspaper (right)

Público is in dark red, Expresso in blue, and CM in red
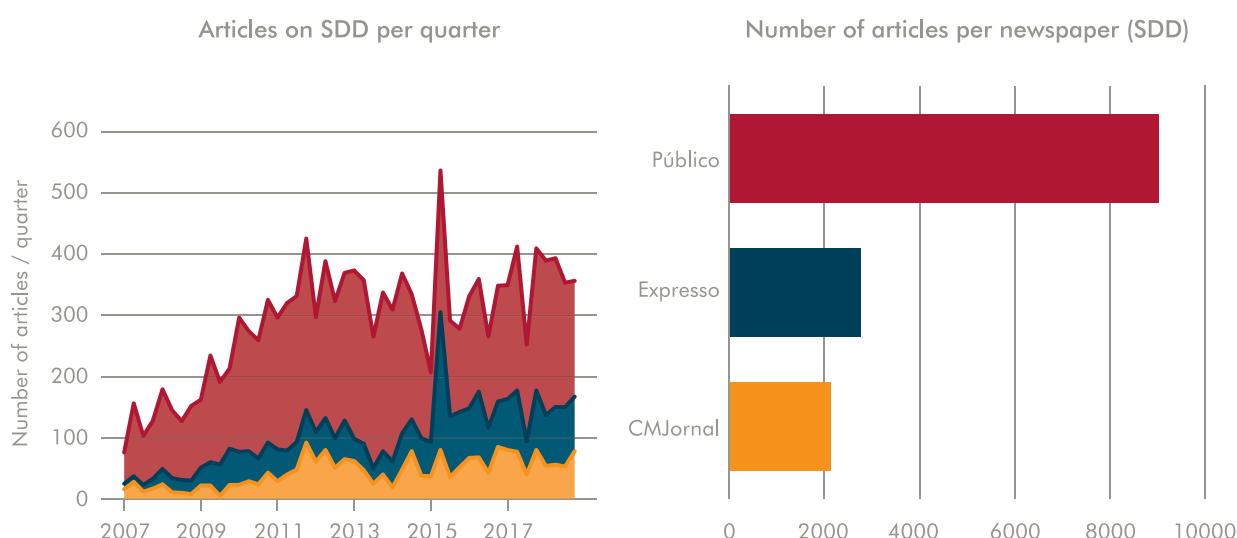
Following the same procedure described above for IJ, we conducted an independent analysis of the sustainability (SDD) topic in the press, and obtained a total of 13,917 articles in the dataset classified as mentioning SDD. As with IJ, Público published more articles in total (9026) than Expresso (2765) and Correio da Manhã (2126) – Figure 2.11. On average, Público published 188 articles per quarter, Expresso published 58 and CM 44. The pattern is similar to that of IJ but without the peak in 2009. The 2015 peak is present, but was again less marked in CM. While there is little correlation between Público and Expresso ($\rho = 0.3$), both Público and CM ($\rho = 0.59$), and Expresso and CM ($\rho = 0.68$) show marked correlations for this topic and, unlike IJ, all these correlations are significant ($p \leq 0.03$). This may well be because the volume of news items mentioning SDD is much higher than the number of articles mentioning IJ. Using the previously described method to create a "baseline" for the total number of articles published, we can estimate that the rate of articles mentioning SDD for each newspaper is: 2.2% in the case of Público, 0.9% for Expresso, and 0.3% for Correio da Manhã.

2.3.2. Thematic Analysis: in which contexts is Sustainability mentioned?

Categories of articles

Figure 2.12.

Top 10 from the count of categories with news items extracted from newspapers, within the articles classified under SDD and IJ. The categories were extracted from each article's link (URL), which vary depending on the newspaper. In the case of Público, the URL provides two types of classification: the type of article and the topic. Most articles include only the type of article and not the topic. In the case of CM, the topic of the articles is also not provided for the categories 'cm-ao-minuto', 'exclusivos' and 'tv-media'
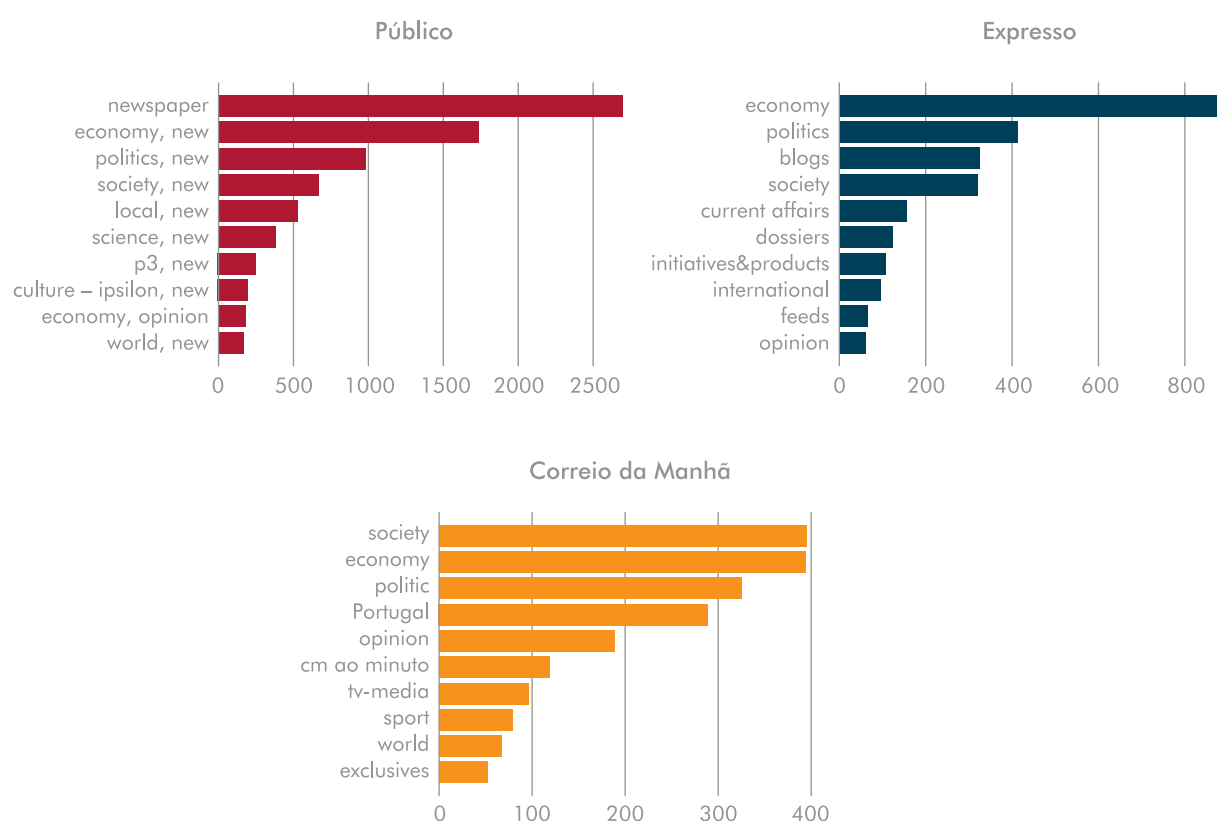
As in the previous analysis, we looked at the categories in which SDD is referred to the most. The results are similar, although the ranking of some categories is different, notably CM's opinion articles are no longer the most common. We then categorised the articles according to the topics defined in Table 1.1, again considering only articles in which the keywords were used at least twice. In this way, we classified 10,177 articles, in other words, 73%: 25% were classified under the sub-topic environment, 25% under social security (SS), 17% under debt, 14% under health, 14% under education, and 5% under others (Figure 2.13). As with IJ, the media initially devoted much attention to the environment, but this declined between 2011 and 2015 and then started increasing again. Debt moves in the opposite direction. Once again, the correlation between these two topics is negative (ρ = -0.6, p = 0.04).

Figure 2.13.

Distribution of the articles per topic over time (left) and total (right) based on the keywords defined in Table 1.1. In the left-hand graphs, the shaded colour represents the proportion of articles that include words/expressions associated to politics (National Assembly [Assembleia da República], government, ministers, political parties, etc)

Articles per category, standardised by the total number of articles
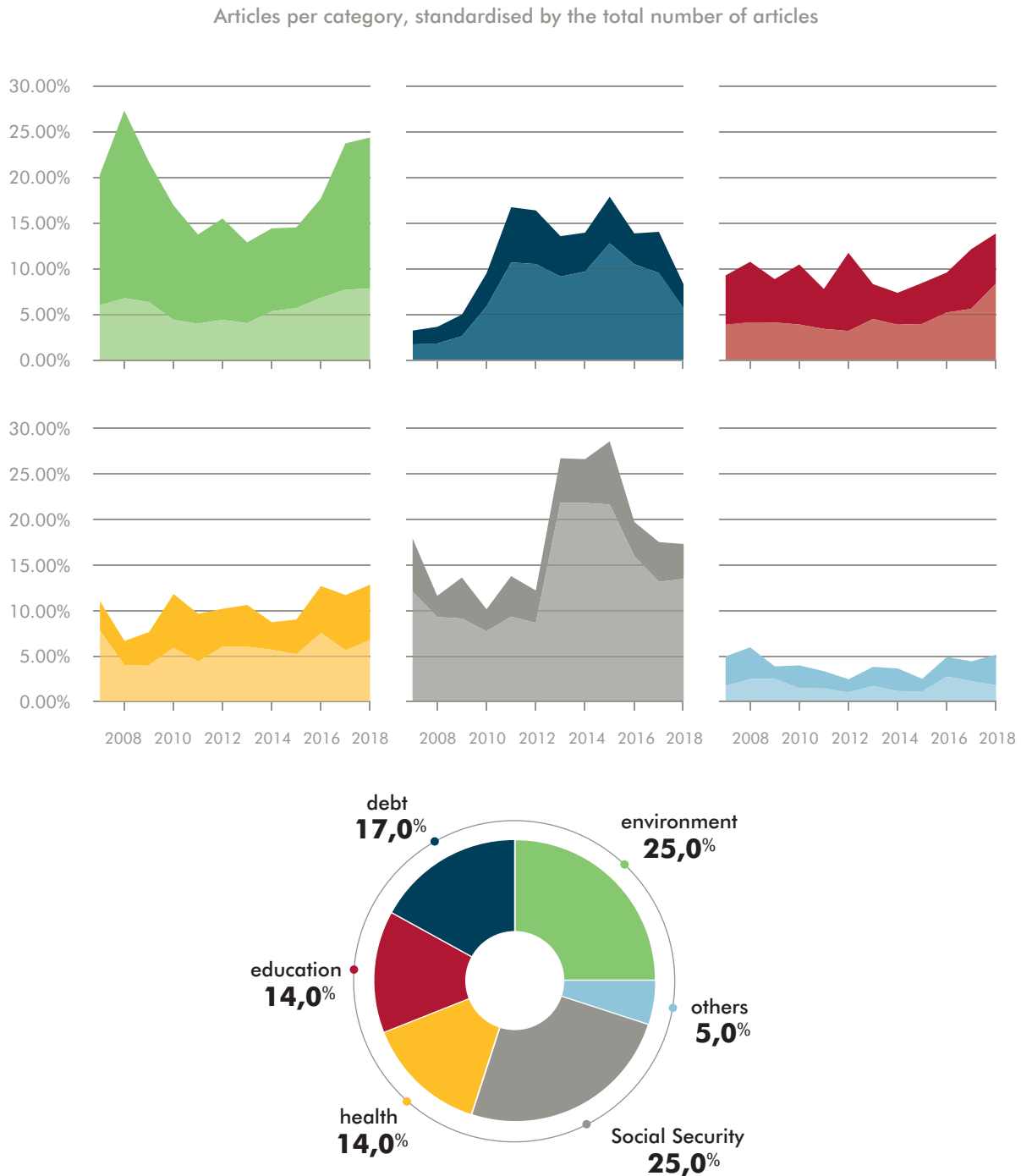
The association between environment and politics was again found to be low (shaded area in Figure 2.13). Social Security stands out in terms of the topics associated to political parties, as it is associated to all the parties – Figure 2.14.

Figure 2.14.

Temporal dynamics (per year) of the news items of the aggregated dataset, per topic and per political party. The data have been standardised by the total articles per year

Temporal dynamics of articles with references to political parties (per category)
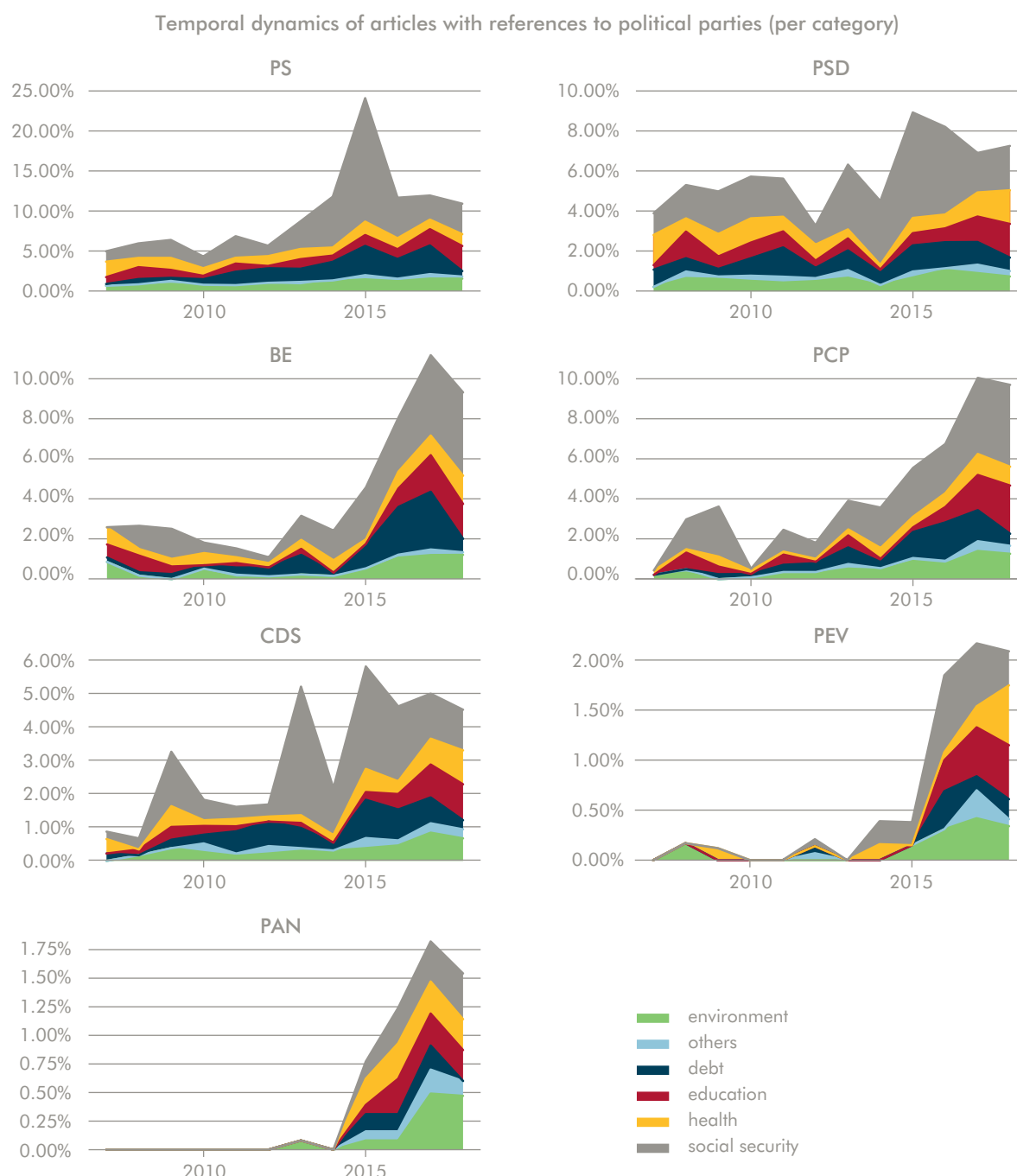
The PS was once again the political party with the most weight in the articles extracted, with a peak in 2015 due to social security. This peak is also observed in the case of the PSD and the CDS. To glean a better understanding of how the topics are distributed across parties, we calculated the proportion of each topic per party. Figure 2.15 shows the clear differences between the different parties, which are significant (analysis of (χ^2, p < 0.001). Repeating the PCA with the frequencies of topics per party, we obtain a first component that explains 92.2% of the data, and a second that explains 3.7% of the data.

The first component has a moderate and positive correlation with the environment and a high negative correlation with the SS. In contrast, the second component is mostly associated with education and inversely correlated with debt and health (Table 2.2).

Table 2.2.
Correlation between principal component 1 (PC1) and principal component 2 (PC2) with each topic. A high correlation (positive or negative) means that a topic has a strong weight in that component

	environment	debt	education	health	SS	others
Principal Component 1	0.42	-0.3	0.22	0.24	-0.76	0.20
Principal Component 2	0.14	-0.62	0.512	-0.46	0.35	0.073

Figure 2.15.
A – Distribution of the articles with identified topic with references to each party. B – Principal component analysis of the frequency of the articles per topic and per party. See Table 2.2 to interpret the principal components 1 and 2

A – Topic distribution per party

B – Principal component analysis
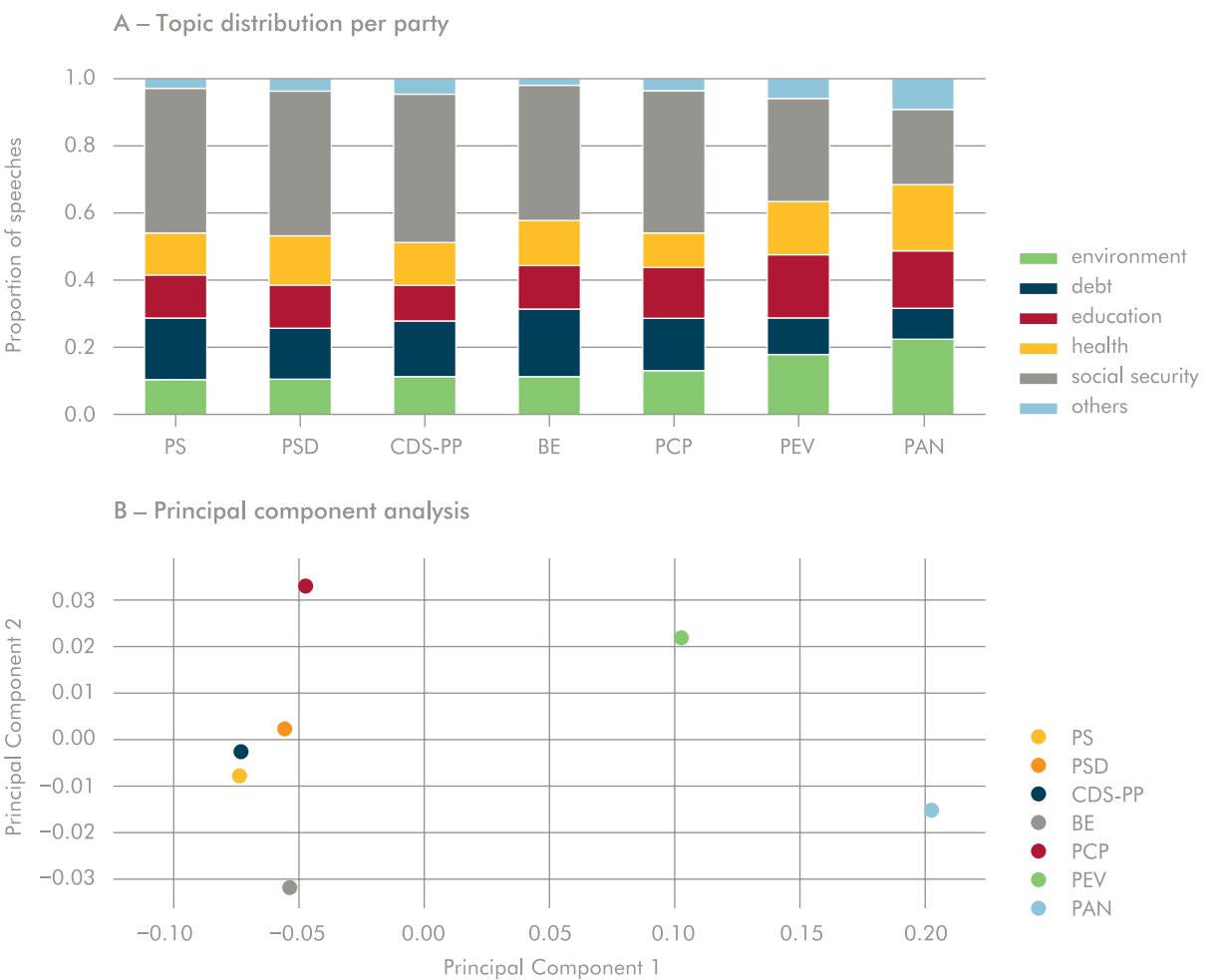
Yet again, and revealing consistency in the analysis, the first component distances PAN and PEV from the other parties, the second component separates BE and PCP, while the other parties are halfway between them. This may indicate that the articles mentioning PAN and PEV are more associated to the environment and less with social security. On the other hand, the articles mentioning the BE are less associated with education and more with debt and health.

2.3.3. Analysis of the content of the articles

Just as with the articles on intergenerational justice, we analysed the content of the articles classified under sustainability automatically.

Word count in headlines, leads and body of the articles

Top 15 words in the headline, lead and body of the sustainability dataset, and respective word count
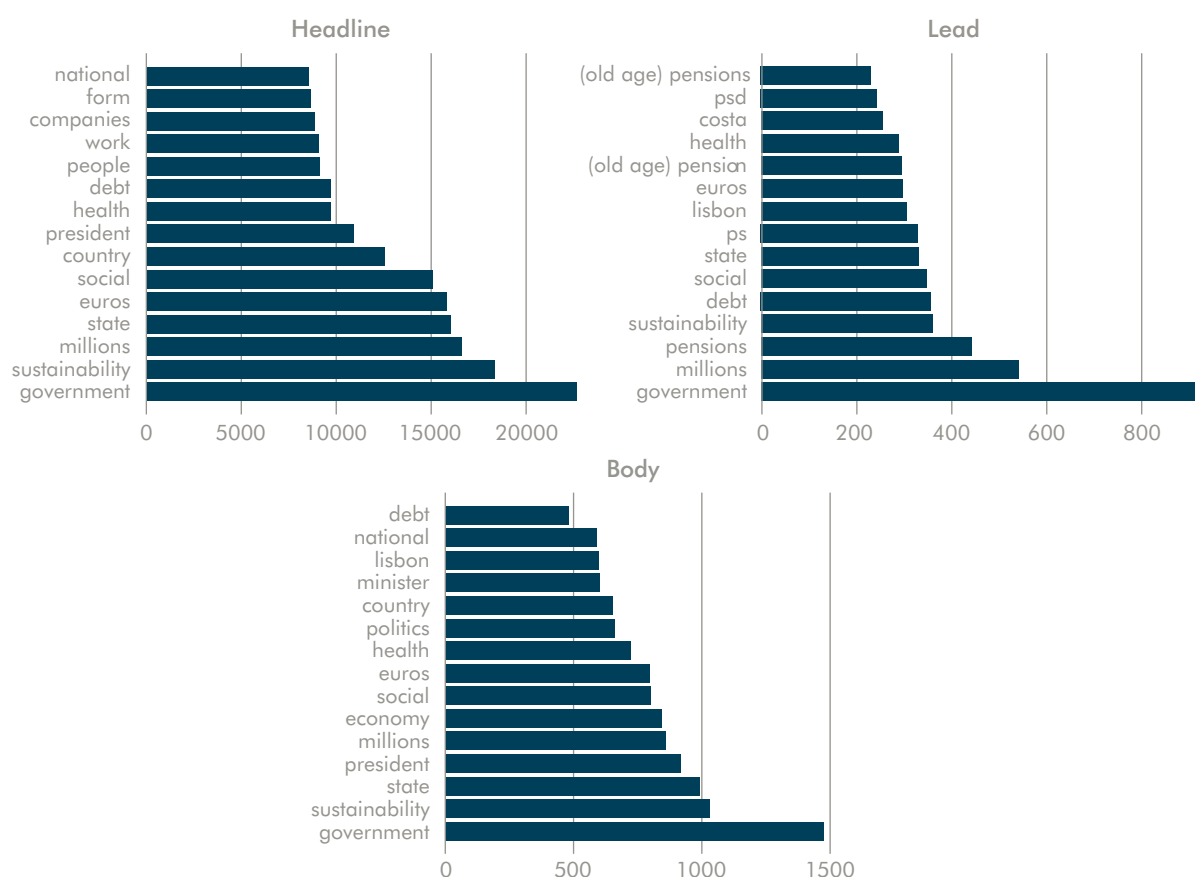
Figure 2.16 shows that there is a prevalence of terms associated with politics, the economy and health, not only in the headline but also in the lead and body of the articles. In terms of political figures, there are frequent references to António Costa and to PS.

Figures 2.17, 2.18, and 2.19 provide the same information but per year.

Figure 2.17.

Top 15 words in the headlines of the news articles per year (SDD+IJ), and respective word count

Word count in news article headlines per year
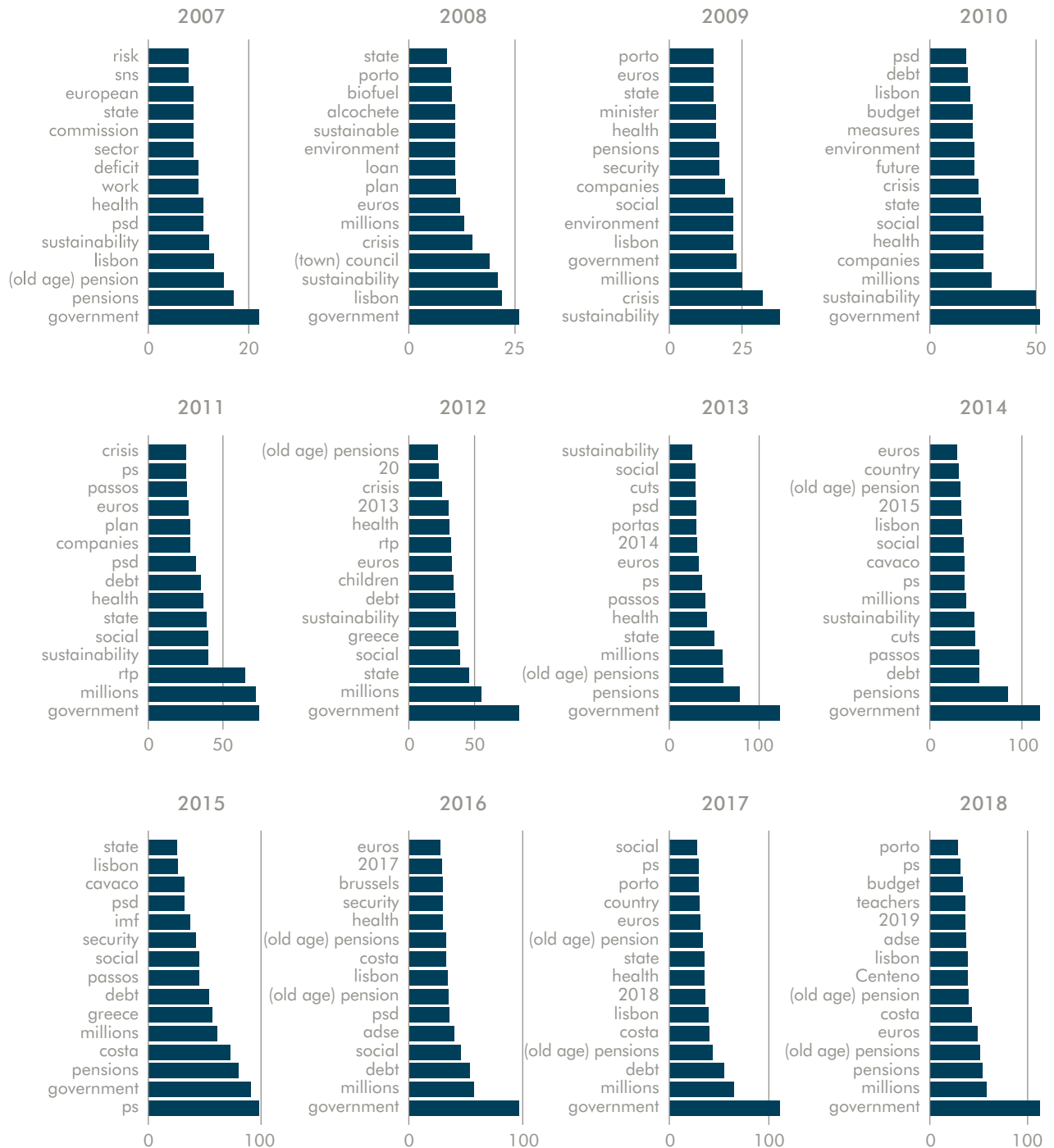
Figure 2.18.
Top 15 words in the news leads classified under SDD per year, and respective word count

Word count in news leads per year
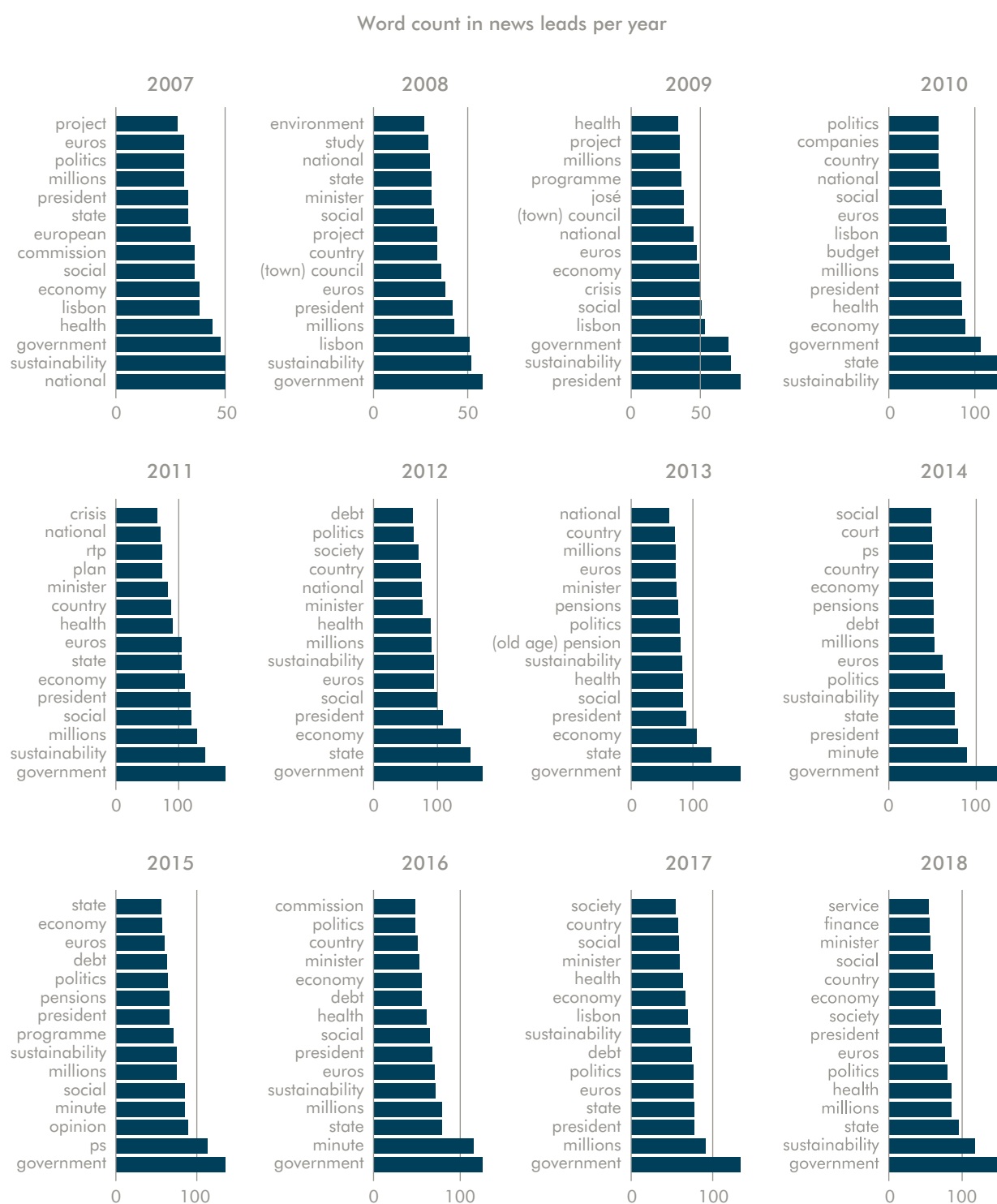
Figure 2.19.
Top 15 words in the body of news articles on sustainability, per year, and respective word count

Word count in the body of the news articles per year
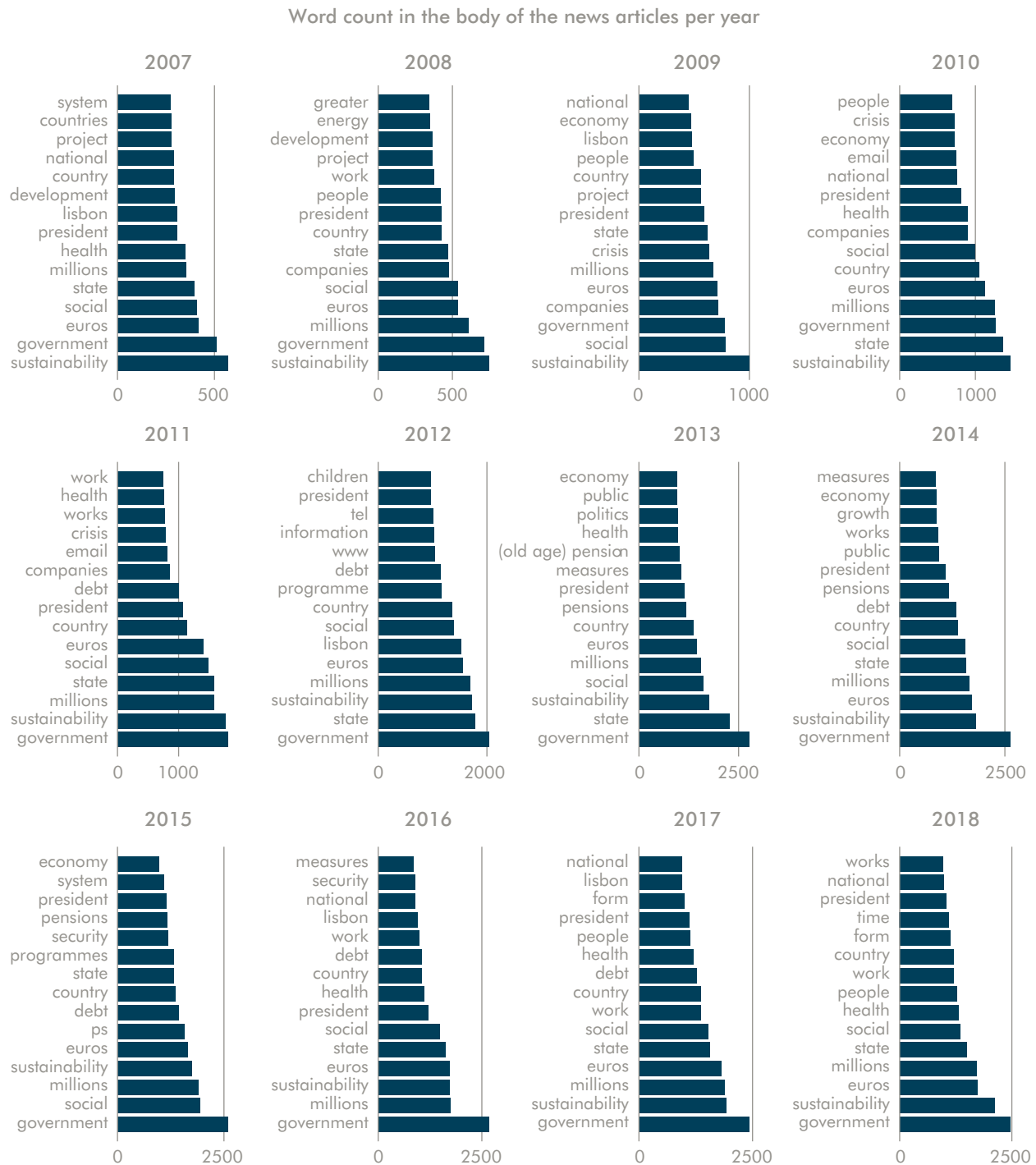
The words **government, millions**, and **(old age) pensions** remain very common year after year in the headlines as well as in the leads and body of the articles, which indicates that a substantial amount of the articles extracted are linked with politics, the economy, and social secu-

rity. However, there are occasional variations: in 2008 we find words such as **development, sustainable, biofuels,** and **environment,** which stand out less as of 2009 and are replaced by the words **crisis** and **debt;** this seems to corroborate the previous results whereby the importance of the 'environment' topic decreased while that of debt and social security increased. In this analysis, words linked with the environment do not seem to make a comeback in this list of post-crisis 'top' words, with more references to **early retirement, adse,** and **teachers.**

Word count of words *neighbouring* key words

As the word count in the headline, lead and body of the articles is, in fact a very broad analysis, we also extracted the 4 words to the left and to the right of the key words *sustainability* and *sustainable* in the body of the news article. This approach provides a list of words that co-occur with the reference words, enabling us to filter the topics and revealing a different context to that of IJ. Figure 2.20 shows a major co-occurrence of the word *sustainability* with the words **financial, social, debt**, and also **environmental**. The declining importance of the word *environmental* in the pattern is again evident during the crisis years. However, it tops the list of co-occurrences again from 2017.

Figure 2.20.
Top 15 words *neighbouring* 'sustainable' and 'sustainability' (considering -4 to +4 *neighbouring* words) per year, and respective word count

Word count of words *neighbouring* 'sustainability' and 'sustainable' in news articles, per year

Figure 2.20. (continuation)
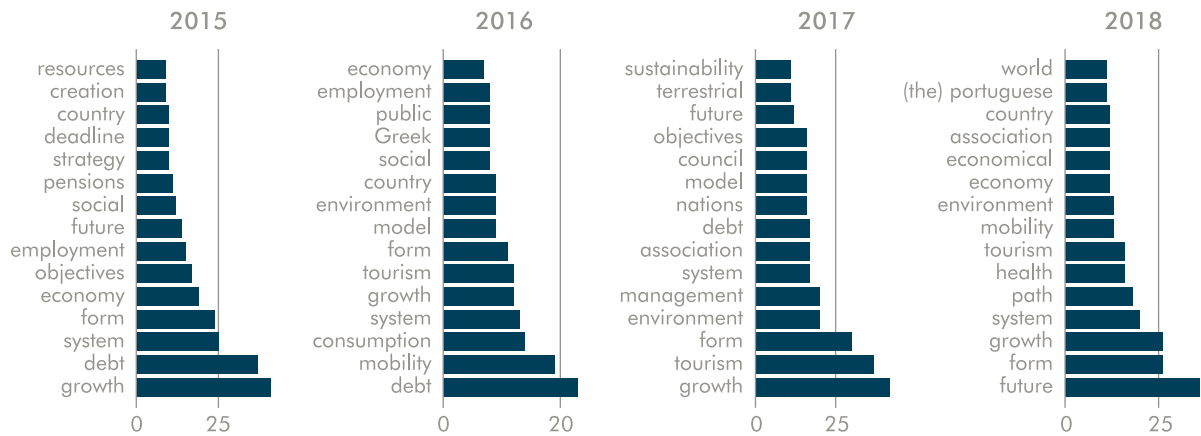
2.4.
CONCLUSION – ONLINE NEWSPAPERS

Although the media gives little attention to IJ and SDD, the references to these topics increased over the last decade. Most of the articles extracted seem to be associated with politics, including parliamentary politics, with the exception of articles referring to the *environment* sub-topic. From 2007 to 2009, the *environment* was the most prevalent topic, but this interest diminished dramatically during the crisis when the topics of *debt* and *social security* gained greater visibility in the Portuguese press.

3.
TWITTER

This chapter describes the analysis of posts on the social network 'Twitter'. We found no mentions to "Intergenerational Justice" and, therefore, only references to Sustainability are included in the analysis. We start by describing the methodology, then presenting the results and finish by drawing some conclusions.

3.1.
METHODOLOGY

Data were extracted from Twitter (www.twitter.com) using the same keywords as previously to determine whether these topics are discussed in the context of social networks. As much of the content on Twitter is in Brazilian Portuguese, we filtered geocoded messages ('tweets') for Lisbon within a 2500km radius – enough to include users on the Islands of Madeira and the Azores. This implied a significant loss in volume (few users share where they are *tweeting* from) but limited the dataset to posts originating from Portugal. As tweets mentioning *intergenerational* and *future/coming generations* (approximately 30) were insufficient to study, the following analysis is restricted to the tweets extracted using the word *sustainability* (approx. 3000). This should be generalizable, since the previous analysis have shown consistent temporal and thematic patterns between the IJ and SDD topics.

3.1.1. Sustainability Tweets in Portugal

Interest in sustainability in the Portuguese 'Twittersphere' seems to have been on the rise since 2009 (Figure 3.1). However, it is important to note that the data are not standardised by the total number of tweets published, and that this increase may simply reflect a general surge in platform usage. In fact, Tweeter usage has been going up in recent years (see, for example, the data from the company Statista: https://www.statista.com/statistics/384450/social-network-penetration-in-portugal/#statistic-Container).

When we used the criteria described in Table 1.1 to categorise the 2936 tweets, only 21% were classified. Following manual analysis, it was evident that the inclusion criteria established for the Parliament and traditional media were not suitable for the analysis of micro-blogging or a social network; for example, although human curation would have easily determined the appropriate category for the following five tweets, they were not classified.

Figure 3.1.
Description of the Twitter dataset – Sustainability
The tweets were extracted in the geographical area of continental Portugal and the Islands of Madeira and Azores, from 2009 to 2018, using the word 'sustainability'; this resulted in a total of 2936 unique tweets. The top left-hand panel shows the dynamics of tweets containing this word over time. The other panels show the top 15 users (in terms of number of tweets posted), websites, and hashtags shared

Temporal dynamics of tweets with the word 'Sustainability'

Top 15 websites shared

Top 15 hashtags

Top 15 users

Sustainability (Twitter) n=603

Others **11,0**%

Environment **32,0**%

Social security **18,0**%

Debt **8,0**%

Health **18,0**%

Education **12,0**%
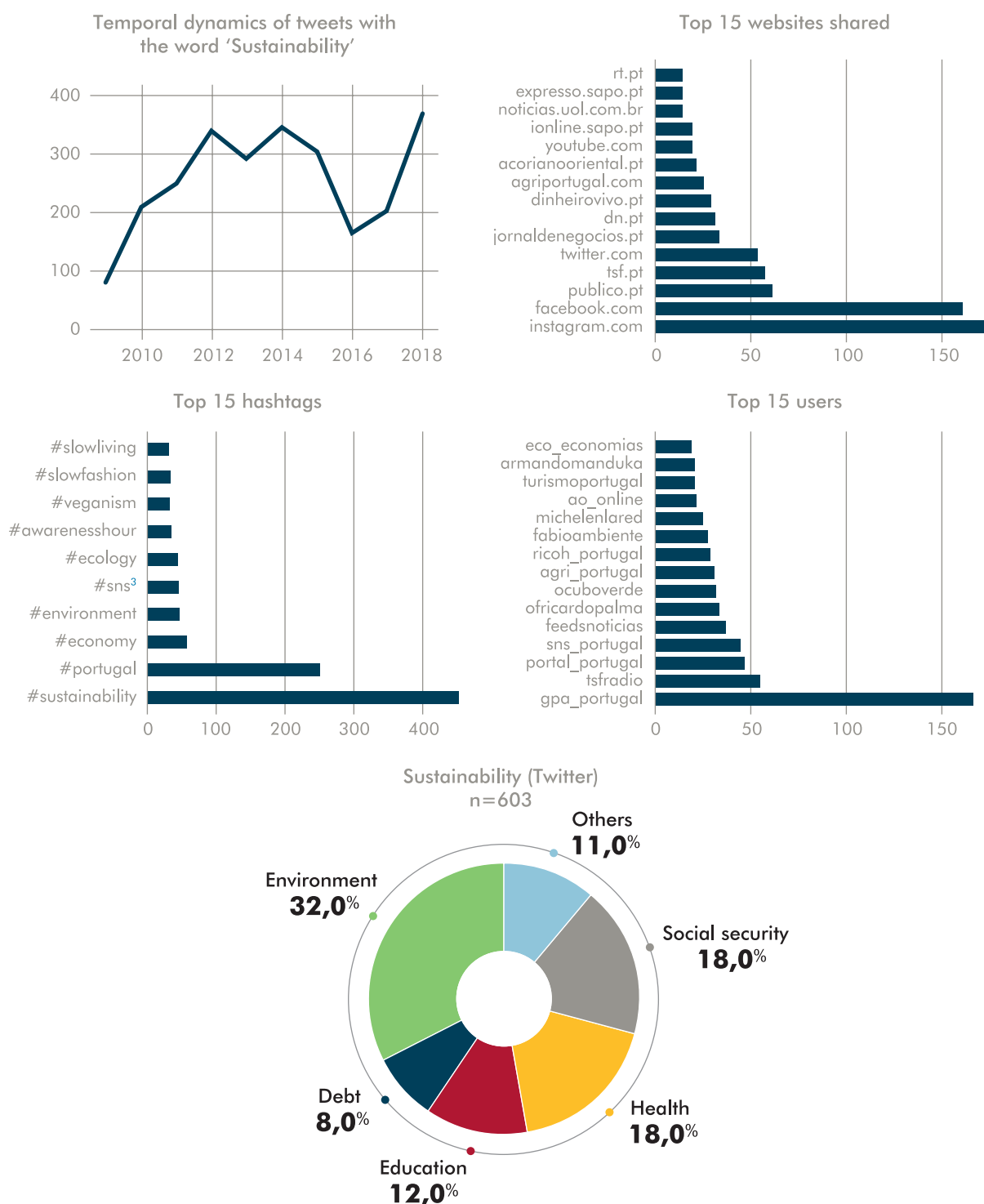
3 T.N. – Sistema Nacional de Saúde (SNS – National Health System).

Private companies show interest in *Águas de Portugal* but require guarantees of financial sustainability.

IMF has doubts about the sustainability of external adjustment – Jornal de Negócios – Portugal

VERTICAL FORREST – Breath-taking project brings together green sustainability and modernity.

RT @greensavers: New York trebled investment in solar power. And this is encouraging hackers to become sustainable...

Fostering growth by ensuring sustainability. Portugal is on the right track.

The main reason for using the previously selected words was to reduce the number of false positives. This makes sense given that both parliamentary debates and articles published in the traditional media tend to have longer texts, and a particular lexicon. In social networks like Twitter, where the shared text is usually shorter, the lexicon potentially different, and there is also a small number of identified instances, this leads to identification difficulties. Unfortunately, given the small volume of tweets, supervised machine learning approaches and training an automatic classifier was not a viable option. A possible approach, hitherto untested, is the analysis of the news leads in newspapers to extract possible synonyms or co-occurrences (for example, 'green' in the case of the environment). Thus, as a matter of coherence, we have chosen to use the same criteria as in previous analyses, despite its limitations.

3.2.
COMPARISON

Contrary to the Parliament and Portuguese newspapers, the environment is the main topic discussed within the topic of sustainability. In fact, the number of #hashtags show that #environment, #ecology, and #veganism were the most posted topics. The analysis of users with the highest number of posts related to sustainability in Portugal also reveals this trend, with users posting topics specifically linked to the environment (for example: eco_economics, fabioambiente, ocuboverde). To avoid duplicates and spammers, we filtered the retweets (tweets that were shared multiple times), retaining only the original tweet.

Twitter enables users to share links in their posts. We used this functionality to glean a better understanding of which websites are shared most in sustainability-related tweets in Portugal. Most links are shared on Instagram and Facebook. However, a substantial number of links refer to online newspapers (Público, TSF, Jornal de Negócios), which means that some of these tweets are related to media activity. To support this association, the sustainability temporal series of online newspapers has a correlation coefficient of $\rho = 0{,}42$ with Twitter's sustainability temporal series. This may also be because online newspapers use Twitter to share their news articles: for example, user tsfradio (TSF's official account) shared approximately 50 sustainability-related news items on Twitter. In addition, we identified a total of 89 news items by the three selected newspapers (Público, CM and Expresso) that had been shared by various users.

3.3.
TWITTER – CONCLUSIONS

The number of tweets about IJ and SDD is very low but, as with the Parliament and newspapers, sharing sustainability-related posts on Twitter has increased since 2009. As some of these shares seem to depend on the activity of newspapers, either because they are shared by the newspapers themselves or by other users sharing news, the independence of the datasets is not evident. Notwithstanding, this is a relevant observation given that these shares represent choices made by users. Indeed, contrary to the analyses of the Parliament and newspapers, sustainability is mostly discussed in the context of the environment.

It should also be noted that an attempt was also made to conduct a similar analysis for the social network Facebook through both computer analysis and manual extraction. Unfortunately, the searches and the identification of the thematic groups (open and closed) found almost no references to Intergenerational Justice. The few exceptions identified originated (or were more widespread) in Brazil, and not a single IJ-related discussion group was identified in Portugal.

4.
CONCLUSIONS

The aim of this report was to shed light on when, by whom, and in which contexts sustainability and international justice is spoken about in the Portuguese Parliament, in three representative newspapers and on Twitter. We therefore sought to define a baseline on which the impact of any future intervention can be measured. Generally speaking, the topics of sustainability and international justice seldom appear but their visibility has been increasing both in the Parliament and the media. In the case of Twitter, they appeared so little that it was only possible to analyse the trends associated to SDD, and not to IJ. Although the trend is not clear, there seems to have been an increase in mentions since 2009; however, one of the difficulties in interpreting these data is that the online newspapers use this platform to publish their articles, which means that this dataset is not entirely independent from that of the articles from the Portuguese media.

When examining the topics, it is important to note that although the observations made in Parliament and in online newspapers are closely aligned, the classification per sub-topic was 85% in the parliamentary speeches vis-à-vis 70% in the articles in the three selected newspapers. The explanation for this difference may lie in the fact that the sub-topics were defined based on a preliminary analysis of parliament and not of the media. On the other hand, the Twitter presence of 'sustainability' issues is largely associated with the environment. This may be indicative of a greater concern among citizens that is not necessarily mirrored among traditional politicians and editors; however, it should be noted that the small set of very active users and with a large number of publications on environmental matters could be skewing the sample. Still, such citizens' concern with the environment has been revealed in independent studies and may provide indications of differentiated strategies: the crisis period implied less emphasis in both Parliament and the news media on the topic of the environment, with greater emphasis on the sustainability of social security and debt; meanwhile, this decline in SDD mentions was not seen in Twitter. This may indicate that topics related with the environment (and IJ and SDD in this context) are more resilient to public opinion, irrespective of the press and the parliamentary priorities, and this provides useful information for the outreach of the general population. As already noted above, it therefore seems that the traditional media are more aligned with the parliamentary

discourse than with what we have observed on Twitter. Nevertheless, it is not possible to make a quantitative measure of the correlation between the data on the parliament and on the media because of scale differences: the period of analysis for the newspaper articles is much shorter than that of parliament and the volume of daily articles is larger than that of parliamentary speeches. However, we hope that the continuity of the publication of online news will soon make a temporal correlation between the parliamentary speeches and the articles possible. Similarly, expanding the number of key words in the Twitter analysis and classification might allow longer term trends on Twitter to be identified and also shed light on how these compare with the other contexts. Lastly, and despite the systematic increase in mentions of IJ and SDD over time in all the platforms analysed, we cannot rule out the hypothesis that this increase is dependent on the growth in the references to the sub-topics identified. In addition, we again note that there is an over-representation of MGs among the speakers that make most frequent mention of IJ and this could suggest greater concern in the Government than in Parliament. Unfortunately, we were unable to identify the references to IJ from politicians and other figures on Twitter, but this could be a fruitful avenue for future analysis, notably as these mentions increase.

Overall, this study provides a starting point for measuring the impact of future strategies. The fact that these topics play such a small part in the political agenda means there is room for growth; moreover, given the upward and quantifiable trend, it is expected that targeted strategies will lead to a rise not only in the growth rate (slope) but also in the absolute numbers.

5.
APPENDICES

5.1.
APPENDIX I – EXCERPTS OF SPEECHES PER CLASSIFICATION

Excerpts from representative speeches of each of the topics and non-classified speeches – sustainability.

Topic	Date	Speaker	Excerpt
environment	1998-10-14	Rui Miguel Gama Vasconcelos Pedrosa de Moura	Assim, para assegurarmos um desenvolvimento **sustentável**, serão necessárias não só políticas setoriais distintas, que tenham em conta o parâmetro **ambiente**, mas, acima de tudo, uma verdadeira política de ambiente, integrada e horizontal.
environment	2001-03-22	Isabel Maria de Almeida e Castro	A vontade política que faça, por exemplo, deste caderno de encargos do plano de desenvolvimento **sustentável** de 1998, não um documento inútil, por regulamentar, mas um documento de intervenção estratégica e eficaz para contrariar as práticas existentes e favorecer o combate à desertificação, a conservação da natureza e a biodiversidade, hoje, totalmente ignoradas. [...] Sr. Presidente, Sr. Deputado Lino de Carvalho, para nós, a questão da floresta também é importante, porque é estruturante em qualquer política de **ambiente**, é um elemento estratégico fundamental num país como o nosso, com problemas gravíssimos de empobrecimento do solo, e é importante para o desenvolvimento.
environment	2010-04-15	Maria Cecília Vicente Duarte Honório	Sr. Presidente, Sr.as e Srs. Deputados: O projecto de lei que o Bloco de Esquerda traz a esta Câmara visa criar um programa de gestão das práticas ambientais relativamente aos campos de golfe e tem claramente dois objetivos definidos: em primeiro lugar, o de reconhecer que estes equipamentos não podem ser criados à luz dos interesses dos especuladores e devem ter em conta os critérios de desenvolvimento das diferentes regiões (portanto, o que deve orientar a instalação destes equipamentos são os critérios de desenvolvimento económico e social de uma região); e, em segundo lugar, o de que os campos de golfe devem ser (e só podem ser) ambientalmente **sustentáveis**, nomeadamente em relação a um bem de primeira necessidade **água**.

Topic	Date	Speaker	Excerpt
health	2006-03-16	Teresa Margarida Figueiredo de Vasconcelos Caeiro	O terceiro ponto de discrepância entre a realidade e o que está no Programa do Governo é a **sustentabilidade** do **Serviço Nacional de saúde**. Sabemos que, ao fim de um ano de Governo, embora não haja um plano e se desconheça o que o Governo vai fazer, o Sr. Ministro nomeou uma comissão, com personalidades de reconhecido mérito – e deixe-me que lhe diga, Sr. Ministro, que concordamos que, primeiro, é preciso estudar para, depois, anunciar, apesar de o Sr. Ministro não ter cumprido este princípio – para, durante um ano, avaliar a sustentabilidade do Serviço Nacional de saúde. Sucede que só ao fim de metade da Legislatura, ou seja, ao fim de dois anos, é que, finalmente, se vai saber ou ter uma ideia de qual será o futuro do sistema de financiamento do SNS e, por inerência, qual será a política integrada na área da saúde.
health	2012-04-11	Paulo Macedo	O processo de mudança em curso é constante e aponta num sentido determinado: a **sustentabilidade** do **SNS** e a preservação dos ganhos em saúde alcançados ao longo dos últimos anos, num sistema que agrega entidades de natureza pública a par dos operadores pertencentes ao setor privado e ao setor social.
health	2012-11-26	Manuel Ferreira Teixeira	Sr.ª Presidente, Srs. Deputados, penso que uma das áreas na saúde em que a reforma foi mais profunda foi exatamente a área do medicamento. O acesso das pessoas ao medicamento aumentou de forma muito significativa. Existe consenso que a racionalização nesta área permitiu que o **Serviço Nacional de saúde** garantisse uma **sustentabilidade** mais firme e, neste sentido, as medidas que o Governo implementou levaram a que Portugal, que tinha como indicador uma despesa per capita e no PIB um consumo de medicamentos dos mais elevados, de facto, tivesse indicadores mais próximos da média. A proposta que o Bloco de Esquerda apresenta sobre a criação do fundo de inovação oferece-nos, quer em termos de filosofia, quer em termos de sustentabilidade financeira e orçamental, fortes críticas.
debt	2010-04-25	José Manuel de Sousa Rodrigues	O que o «patriotismo económico» nos obriga a fazer é a reduzir a despesa, em vez de aumentar a carga fiscal; é a disciplinar a administração, em vez de sacrificar a sociedade; é a poupar nas empresas públicas, em vez de atacar as pequenas e médias empresas; é a praticar a austeridade do Estado, em vez de empobrecer a classe média, como tem acontecido. A História prova que não há crescimento económico duradouro e **sustentável** com demasiada **dívida** e demasiado défice. É por isso que existe um terceiro d – o desemprego.

Topic	Date	Speaker	Excerpt
debt	2014-04-16	Mariana Rodrigues Mortágua	Este não é o País que nós podemos querer ou defender em democracia. A necessidade de manter o garrote da **dívida** é tal, por parte dos partidos da maioria, que o Governo inventa números para provar que a dívida é **sustentável** – todas as semanas temos novos números! Há meses, o Sr. Primeiro-Ministro dizia «1,8% de saldo primário, 2% de PIB e a dívida é sustentável e ainda pode ser reduzida no futuro». O FMI veio desmenti-lo: não é possível! E há também instituições financeiras e fundos de investimento a desmenti-lo.
debt	2014-05-12	José Manuel Marques de Matos Rosa	Tivemos de agir rapidamente, para minimizar a trajetória de recessão, para estancar a **dívida**, para preservar o Estado social e preparar o crescimento **sustentável** da economia.
education	2002-07-19	José Honório Faria Gonçalves Novo	Do ponto de vista do PCP, importa igualmente que na estratégia nacional de desenvolvimento sustentável o pilar social assuma o protagonismo pré-anunciado. Da mesma maneira, considera o PCP que não pode deixar de ser associada ao pilar social a **sustentabilidade** produtiva da economia e a sua íntima ligação à sustentabilidade humana, seja ao nível da **educação**, da formação, da saúde, da segurança social ou dos serviços públicos de qualidade.
education	2008-10-08	José Sócrates	Depois, Sr. Deputado, há um ponto absolutamente essencial, que defendo, e defenderei, que é a **sustentabilidade** das políticas sociais. Eu gosto demasiado do Estado e tenho tanto apreço pelas políticas sociais que não aceito que o facto de o Estado ter dívida a mais ou défice a mais ponha em causa o futuro dessas políticas sociais. E foi justamente num esforço patriótico, de defesa das políticas sociais – na segurança social, na **escola** pública, na saúde –, que fizemos as reformas e as mudanças em favor de um Estado social, que está aqui hoje para ajudar quem precisa e que estará, no futuro, para desenvolver essas políticas, com o mesmo nível de intensidade como as desenvolve hoje.
education	2014-04-30	Duarte Filipe Batista de Matos Marques	É por isso que percebemos que a verdadeira violência neste País foi uma violência que aconteceu contra o desenvolvimento **sustentável** do nosso País, com exemplos como o da Parque **Escolar** e a falta de rigor que gerou em Portugal. Sr.as e Srs. Deputados, não podia terminar esta intervenção sem deixar de recordar a todos que o que é muito importante é que ninguém deixe de falar, que ninguém deixe de exigir que, no próximo ano letivo, não voltem a acontecer abusos, como aconteceram no passado, e a campanha de divulgação, a campanha de tolerância zero à praxe violenta e à praxe estúpida deve ser uma campanha que nos una a todos.

Topic	Date	Speaker	Excerpt
SS	2005-10-21	Teresa Margarida Figueiredo de Vasconcelos Caeiro	Como dizia, esta teria sido uma oportunidade para que o Governo expusesse o que pensa e que medidas pretende adoptar para uma verdadeira reforma da Administração Pública, para uma verdadeira avaliação do desempenho pelo mérito e pela qualidade dos serviços, mas também para que nos dissesse se tem alternativas construtivas, e não apenas penalizadoras, para assegurar a **sustentabilidade** da **segurança social**, como irá criar mais emprego, aumentar a produtividade dos trabalhadores, elevar a competitividade das nossas empresas e gerar e mais riqueza. Mas não, ficamos, mais uma vez, numa nebulosa.
SS	2009-01-14	Paulo Sacadura Cabral Portas	Sr. Presidente, Sr. Primeiro-Ministro, fiz-lhe uma pergunta muito concreta: por que é que uma geração onde era frequente ter dois ou mais filhos, que já contribuíram com os seus descontos para a **sustentabilidade** da **segurança social**, há-de ser penalizada como outras, não nas mesmas circunstâncias nas suas pensões, quando chega a idade de se reformar?
SS	2014-03-26	Luís Filipe Montenegro Cardoso de Morais Esteves	Mas, Sr.as e Srs. Deputados, e com isto termino, também tivemos ocasião de abrir um debate, para o qual queremos chamar todos, relativamente à sustentabilidade demográfica, à política da natalidade e à **sustentabilidade** da nossa **segurança social**. Todos sabemos – e não é de agora, é de há várias décadas – que temos um problema de sustentabilidade. A questão está em cada um de nós dar o seu contributo e podermos também aqui estabelecer um compromisso, um compromisso interpartidário, um compromisso que possa contar também com o contributo dos parceiros sociais, mas um compromisso para as pessoas, para os nossos cidadãos e, voltando ao princípio, para aqueles que aqui estão hoje e para aqueles que aqui estarão a seguir a nós.
others – agriculture	2006-04-26	Miguel João Pisoeiro de Freitas	Esta é que é a questão: os senhores não sabem, mas, se esta medida tivesse sido decidida, estaria em causa a **sustentabilidade** do sistema agro-ambiental, em Portugal. Foi isso que não permitimos. Foi por isso mesmo que o Sr. Ministro tomou aquela decisão, naturalmente, a favor do futuro, que é o que mais interessa nesta altura. […] Fica-lhe muito mal, Sr. Deputado Miguel Freitas, ofender a honra de quem aqui não está e de quem já fez muito mais pela **agricultura** em Portugal do que alguma vez o Sr. Deputado porventura há-de fazer neste país. Sr. Presidente, peço a palavra.

Topic	Date	Speaker	Excerpt
others – security	2007-06-08	Nuno Miguel Miranda de Magalhães	Os orçamentos de funcionamento e equipamento na área da segurança têm de aumentar, garantindo, simultaneamente, que a gestão das forças **policiais** é capaz de renovar, com saldo positivo, os efetivos. Não podemos esquecer o crescimento e diversificação de fenómenos que, em si mesmos ou articulados com ameaças já existentes (como o tráfico de droga e o terrorismo), constituem novos motivos de insegurança. Daí a exigência de uma política que reforce a autoridade do Estado e que garanta a existência de um investimento planeado, **sustentável** e atualizado das nossas forças de segurança. Ora, à semelhança do que propusemos para as Forças Armadas, só com uma lei de programação de investimentos é possível enquadrar, programar e racionalizar este investimento.
Non-classified	2012-01-13	Amadeu Albertino Marques Soares Albergaria	Sr. Presidente, para concluir, acrescentaria ainda o seguinte: a Organização Internacional da Vinha e do Vinho lançou, recentemente, novas normas ambientais para o setor vitivinícola, onde recomenda a utilização da rolha de cortiça enquanto produto **sustentável**.
Non-classified	2014-03-12	Sandra Maria Sias Cardoso	Nesse sentido, relembramos que, em 2013, foi aprovada a Resolução da Assembleia da República n.º 128/2013, de 7 de agosto, que recomenda ao Governo o estudo e a adoção de medidas urgentes de apoio e **sustentabilidade** do setor automóvel nacional.
Non-classified	2015-02-04	Fernando Luís de Sousa Machado Soares Vales	Todos nos lembramos, ainda, da célebre imagem do Ministro da Economia, Manuel Pinho, enfiado na piscina com um atleta olímpico a posar para as câmaras ou a tirar uma selfie sorridente. Não são este tipo de episódios que promovem o turismo em Portugal; pelo contrário, optamos agora por uma abordagem mais **sustentável** e eficaz: mostramos in loco o País aos profissionais dos média internacionais da área do turismo; agimos em ações organizadas de relações públicas para formar líderes de opinião, de blogues, de redes sociais, de meios de comunicação especializados. São esses os canais que captam a atenção e trazem turistas.

Excerpts from representative speeches of each of the topics and non-classified speeches – intergenerational justice.

Topic	Date	Speaker	Excerpt
environment	1992-03-05	André Martins	Iremos requerer a vinda dos responsáveis do Ministério do ambiente e Recursos Naturais à Comissão de Administração do Território, Poder Local e ambiente para que nos seja dito aquilo que o Ministério fez, está a fazer e vai fazer no sentido de prever, no futuro, situações de degradação do **ambiente**; […] Isto é apenas aquilo que vemos, porque, tal como todos sabem, os efeitos dos produtos lançados no rio têm, a médio e a longo prazo, diversas repercussões. Esses efeitos só serão, talvez, visíveis para as **gerações futuras**. Devido à falta de investigação e de investimento que existe neste domínio, em Portugal, apenas constatamos aquilo de que nos apercebemos das imagens que a televisão ou a comunicação social nos apresenta.
environment	1997-07-03	Helena Roseta	Não podemos associar **ambiente** e ordenamento numa perspetiva de desenvolvimento sustentado ou que liberte as **gerações futuras** dos problemas que criámos e trazemos de trás sem melhorar a eficiência institucional e os mecanismos democráticos. É por isso que, quando as Sras. Deputadas do Partido Ecologista Os Verdes aqui se queixam de que há muitos protestos da população contra a localização dos aterros, não estão mais do que a dar sinal de uma forma de funcionamento dos mecanismos democráticos.
environment	2001-06-27	José Eduardo Martins	Estamos a voltar atrás 40 anos nessa decisão, sobretudo tendo em conta a perspetiva absolutamente insustentável dos Estados Unidos de identificarem o interesse mundial com o seu interesse nacional, de recusarem um princípio de solidariedade **intergeracional** que vem do tempo de Jefferson. […] É evidente que o grande desafio que se coloca à política de ambiente, ao desenvolvimento sustentável e ao cumprimento dos objetivos de Quioto é a capacidade de um ministério do ambiente praticar uma política transversal, de influenciar outros ministérios.

Topic	Date	Speaker	Excerpt
health	2012-04-05	João Pedro Semedo	Deputados do PSD e do CDS já se esqueceram ou, porventura, ignoram a campanha que têm feito, responsabilizando os direitos dos mais velhos pela perda dos direitos dos mais jovens, criando e instigando, sim, a um falso **conflito intergerações**? Já se esqueceram disso?! Dizem agora, nas vossas resoluções, que é preciso melhorar as condições para entrar na reforma. Será que isso significa que vão aumentar a idade da reforma, porque é essa a política que têm defendido? Será que isso significa que vão devolver os subsídios – que ainda agora acabámos de discutir – aos reformados a quem acabaram de os retirar? Será que vão aumentar o valor das pensões? A vossa política vai exatamente no sentido contrário.Por último e se me permitem a expressão, têm até o descaramento de dizer que é necessário sensibilizar os mais velhos para os cuidados de **saúde**.
health	2012-12-19	Michael Seufert	Mas tem de ser uma Constituição que responsabilize os governantes por aquilo que fazem e que impeça que tenhamos de dizer mais uma vez aos nossos filhos e aos nossos netos que desfizemos o País em nome de políticas sociais que não serviram a **justiça intergeracional**. Temos de ter políticas sustentáveis e uma rede de proteção que permita que todos tenham educação, **saúde** e direito à dignidade humana.
health	2013-10-25	Mariana Mortágua	Procura, também, além de definir e determinar o que é bem público, esclarecer e determinar muito claramente que o que é de todos, exatamente porque é de todos, não pode ser vendido, não pode ser alienado e não pode ser concessionado. Fazemo-lo porque achamos que nenhum governo tem o direito de vender aquilo que é de uma sociedade, aquilo que é das gerações anteriores e que é também das **gerações futuras**. […] Em segundo lugar, a importância da definição deste domínio público prende-se com a garantia de que o que é público não pode nem deve ser gerido com princípios de lucro, tem de ser gerido com outros princípios, e por uma razão muito simples: porque implica direitos de **saúde**, direitos de defesa, de mobilidade, de educação.

Topic	Date	Speaker	Excerpt
debt	1986-04-03	José Nogueira de Brito	Ao discutirmos e participarmos ativamente num processo que foi positivo na perspetiva do trabalho desta Assembleia, a nossa primeira preocupação foi, como sempre e acima de tudo, uma preocupação com o País. Desde logo, foi a preocupação com o montante da **dívida** pública e a hipoteca sobre as **gerações futuras** que ela representa. De resto, somos já futuro e estamos já a pagar aquilo que desde há uns anos atrás foi indevidamente despendido.
debt	2010-09-24	Luís Mota Soares	Sabe, Sr. Ministro, há duas grandes diferenças entre um português que compra casa e este Governo. A primeira é que um português só compra casa quando sabe que a pode pagar e o Governo constrói obras **endividando-se** e passando esse encargo para as **gerações futuras**. A segunda é que um português que compra casa faz contas, o Governo só faz inaugurações.
debt	2012-07-11	Pedro Passos Coelho	Sr. Deputado, é por isso que não podemos endossar às **gerações futuras** um peso, uma **dívida** e um desregramento herdado das gerações atuais e passadas.Essa é a razão por que entendo que o Estado deve impor limites às escolhas dos governos, independentemente de podermos pensar que o Estado possa ter mais ativismo ou menos ativismo, possa levar políticas públicas mais longe ou menos longe, apostar mais no setor público ou deixar mais recursos para a economia privada, independentemente disso, não temos o direito de endossar, qualquer que seja a nossa visão sobre esse ponto, um condicionamento como aquele que nesta altura está a acontecer às gerações futuras.
education	2010-10-07	Isabel Alçada	Esta obra, que foi realizada e continua em curso, inclui ainda uma adequação dos edifícios escolares às exigências de funcionalidade, segurança e conforto que são bem conhecidas por todos. No dia 5 de Outubro, abrimos muitas escolas para que a comunidade educativa pudesse visitá-las. As **escolas** estão abertas, os portugueses podem visitá-las e ver diretamente a obra que a nossa geração está a realizar. Aplausos do PS Aliás, a nossa geração pode orgulhar-se de legar às **gerações vindouras** um parque escolar de muito melhor qualidade do que aquele que recebeu.

Topic	Date	Speaker	Excerpt
education	2002-10-02	Jorge Nuno Fernandes Traila Monteiro de Sá	Sabemos que os erros de hoje poderão hipotecar o futuro da nossa e das **gerações vindouras**, por isso lançamos este repto à nossa geração, para que, em parceria, todos assumamos este projeto de sociedade e de País. Deixamos claro que a política de juventude não pode, não deve e não será certamente uma política para minorias mas, sim, uma política integrada e que atravessa todas as áreas da governação - e estamos conscientes de que o atual Governo de Portugal tem a perfeita noção destas palavras. Sabemos que o voluntariado jovem e o associativismo juvenil são fundamentais, mas a política de juventude não se pode resumir a isso. Na **educação**, por exemplo, todos sabemos que o futuro do País será o reflexo do seu sistema de ensino. E o que tivemos nestes últimos anos? Uma política enganosa por parte do Estado, em que se abriram desregradamente cursos, a torto e a direito, lançando milhares de jovens com formação no desemprego. Uma política de ilusão com a qual não pactuamos!
education	2013-11-26	António José Seguro	O Estado social absorvente com tentação de Estado totalitário de que o Governo fala é o mesmo Estado que permitiu que o nível de vida dos portugueses se aproximasse dos padrões de bem-estar europeus; é o mesmo Estado que permitiu recuperar atrasos civilizacionais e colocar o nosso País no grupo dos países com melhores desempenhos na evolução da esperança de vida e na diminuição da mortalidade infantil; é o mesmo Estado que, na **educação**, permitiu melhorar a preparação dos mais jovens e investir nas **gerações futuras**, reduzindo o abandono escolar precoce e aumentando a taxa de escolarização na pré-primária, investindo na ciência e na tecnologia, fazendo dos atuais jovens a geração mais qualificada de sempre; é o mesmo Estado que reduziu a pobreza e garantiu níveis de proteção social universal, em particular aos mais idosos.
SS	2010-07-14	Maria José Gamboa Santos	Por isso, ao pensar no complemento solidário para idosos, entende que este não pode ser pensado na lógica das **pensões**, porque é apenas um complemento, sujeito a uma condição de recurso. A principal dimensão desta condição de recurso é também uma novidade na forma de pensar a sociedade e a solidariedade **intergeracional**. Esta condição de recurso supõe, entre outras dimensões, a responsabilidade familiar, que é uma dimensão concreta do que consideramos ser o pensamento das políticas de esquerda: conciliar a solidariedade intergeracional com a responsabilidade do Estado, subsidiária a esta solidariedade.

Topic	Date	Speaker	Excerpt
SS	2016-05-04	Tiago Barbosa Ribeiro	O PSD e o CDS não o esconderam, defenderam a privatização progressiva da **segurança social** com a introdução do plafonamento. Ao abrigo de uma falsa liberdade de escolha, a direita quer transformar um sistema que é público, que é universal, que é obrigatório, que é **intergeracional** numa espécie de conta-poupança individual, optativa para os mais ricos, assemelhada a um depósito a prazo.
SS	2016-07-06	Diana Ferreira	O CDS que, tantas vezes se afirma pela solidariedade, quer acabar com a solidariedade **intergeracional** na **segurança social** e faz da guerra de gerações a base onde assenta a sua política e as suas propostas.
others – agriculture	1982-07-01	Augusto Ferreira do Amaral	Essa preocupação tem que ser nossa, porque nós não estamos a legislar para a nossa geração nem para a nossa época, mas sim para um país que pretendemos continue indefinitivamente a assegurar no seu suporte físico, no seu território, a capacidade de produção de produtos **agrícolas** de que as **gerações vindouras** hão-de necessitar.
others – agriculture	1983-06-28	José Vitorino	Mas isso implica, além de competência, uma vontade e determinação férreas, estabelecendo as prioridades e atuando sem recuos nem transigências. E na parte que respeita ao Estado deverá investir e incentivar, mas ao mesmo tempo regulamentar e controlar o que claramente possa prejudicar o interesse colectivo e as **gerações vindouras**. Sr. Presidente, Srs. Deputados: Em todo o País, e mesmo no estrangeiro, é hoje perfeitamente conhecida a riqueza potencial que o Algarve constitui em 3 sectores fundamentais da actividade económica nacional: a **agricultura**, a pesca e a piscicultura e o turismo.
others – security	2006-01-25	Sónia Mendes	Afinal, o nosso dia-a-dia e o destino das **gerações vindouras** dependem das opções que nessa sede se fizerem. A política criminal define-se através de leis ou decretos-leis do Governo autorizados pela Assembleia da República, existindo, contudo, política criminal muito para além deste nível. A prevenção e repressão da criminalidade integram, a par da segurança interna, a política geral do País, que, por força da Constituição, cabe ao Governo desenvolver. É, aliás, ao Governo que pedimos contas se a zona em que vivemos é deficientemente **policiada**, se determinado tipo de crimes são investigados com lentidão ou se aumenta o seu número.

Topic	Date	Speaker	Excerpt
Non-classified	2001-06-12	Manuel António dos Santos	Queria apenas dar um pequeno conselho à Sr.ª Deputada Manuela Ferreira Leite. É que a Sr.ª Deputada não pôs bem a questão dos seus filhos, porque o problema não se põe em termos de «isto ou aquilo» mas, sim, em termos de conseguir ter força, audácia e vontade para dar tudo. Nós também não podemos sacrificar a geração presente às **gerações futuras** e por isso é que pensamos que é possível, com equilíbrio e moderação, dar satisfação à geração actual e à geração futura.
Non-classified	2007-01-12	Leonor Pereira dos Santos	Sr. Presidente, Srs. Membros do Governo, Srs. Deputados: Estamos aqui a falar de 18 anos – a partir da Constituição de 1989 – em que leis importantes para definir os bens que integram do domínio público do Estado e o regime e condições da sua utilização não foram promulgadas. Estamos aqui a falar de lacunas que se vão mantendo.Parafraseando um chefe índio, eu diria que os bens do domínio público do Estado foram-nos emprestados em herança pelos nossos antepassados para os usufruirmos, os valorizarmos e os transmitirmos às **gerações futuras**, portanto não se compadecem com estas lacunas. Joseph Stigliz, Prémio Nobel da Economia, denuncia, no seu último livro, as consequências catastróficas que podem advir para um país pelo facto de as contas públicas ou nacionais não terem em conta o seu stock de recursos naturais e patrimoniais.
Non-classified	2012-04-18	Vera Lúcia Rodrigues	Não se trata aqui de um exercício de atribuição de culpas, mas de um exercício de memória. O Partido Socialista que hoje fala em desenvolvimento sustentado no seu projeto de resolução é o mesmo que investiu 38% do seu orçamento de transportes na rodovia, é o mesmo que confinou a ferrovia ao megalómano projeto do TGV, é o mesmo que lançava obras sem fazer contas e é o mesmo que hipotecou **gerações futuras** sem lhes pedir autorização!

5.2.
APPENDIX II – EXCERPTS OF SPEECHES PER SPEAKER

Excerpts of speeches by speaker from the the various parties about intergenerational justice.

Party	Date	Speaker	Excerpt
PSD	2014-10-09	Mário José Magalhães Ferreira	Segundo ponto: o acesso da **água** para todos é exatamente o centro desta questão. Para garantirmos o acesso da água para todos, temos de o garantir agora, para nós, mas temos de o garantir para as **gerações futuras**. E, para isso, do que precisamos? De sustentabilidade do sistema.
PSD	2014-10-31	Luís Filipe Montenegro Cardoso de Morais Esteves	Sr.ª Presidente, Sr. e Srs. Deputados, a mudança controla a despesa, sustém a dívida e não onera as **gerações vindouras**. A despesa pública primária diminuiu 11,5 mil milhões de euros em quatro anos. A **dívida** deixou de crescer e está numa trajetória de sustentabilidade.
PSD	2016-05-06	Luís Manuel Morais Leite Ramos	Os senhores, que criaram a despesa, que apoucam a poupança que foi feita pelo anterior Governo e que agora vêm com «pezinhos de lã» propor uma redução dessas portagens, deveriam ter vergonha por não reconhecerem que deixaram o País, a **dívida** e encargos aos portugueses para as **gerações futuras** pagarem.
PS	1997-07-15	Maria Jesuína Carrilho Bernardo	A ratificação relativa ao alargamento da NATO irá passar, ao longo do próximo ano, pelos parlamentos de todos os países envolvidos, membros atuais e membros aceites. Esta é mais uma razão para que o nosso Parlamento, tal como está a acontecer com outros, não deixe de demonstrar que está atento a tão importante acontecimento. O significado de todo este processo será certamente memorável para as **gerações vindouras**.
PS	2010-06-25	Ana Catarina Veiga Santos Mendonça Mendes	Não será aplaudido por aqueles que procuram a facilidade mas receberá, seguramente, o aplauso das **gerações futuras**, que perceberão melhor os riscos que Portugal correria se não estivesse à altura das suas responsabilidades. É por isso que devemos sublinhar, saudar e cumprimentar o Governo e o Sr. Primeiro-Ministro pelas medidas que aqui apresentaram hoje.

Party	Date	Speaker	Excerpt
PS	2013-06-18	Maria Gabriela da Silveira Ferreira Canavilhas	Os problemas económicos, **ambientais**, sociais e políticos que precisamos de resolver e para os quais precisamos de preparar as **gerações futuras**, são globais no seu âmbito e exigem uma cidadania reforçada, informada, exigem competências para avaliar a evidência histórica, competências para pensar criticamente os princípios económicos, competências para comparar visões diferentes de justiça social.
PEV	2014-04-03	Heloísa Augusta Baião de Brito Apolónia	O conceito de desenvolvimento sustentável é um conceito onde o **ambiente** ganha uma dimensão de centralidade, na lógica do desenvolvimento, e visa corresponder às necessidades das gerações presentes sem pôr em causa a satisfação das necessidades das **gerações futuras**.
PEV	1992-03-19	André Valente Martins	É a partir desta evidência que todos reconhecemos, mas pela qual nem todos parecem dispostos a assumir a responsabilidade que lhes cabe no encontrar das soluções mais eficazes e adequadas para evitar que as **gerações vindouras** nos acusem de lhes deixarmos como herança um futuro hipotecado, que trazemos hoje à Assembleia da República um dos problemas mais: graves que afetam o nosso futuro comum e que tem particular incidência no nosso país: a situação da floresta.
PEV	2002-05-08	Isabel Maria de Almeida e Castro	O nuclear, Srs. Deputados, foi, de modo preocupante, trazido de novo para a agenda política europeia pela mão da Comissária Europeia da Energia, a propósito dos compromissos de Quioto. Uma clareza que, perante este fenómeno e face a uma opção energética, exige uma nova atitude, que veio impor aos povos, aos Governos, aos Estados uma nova ética de responsabilidade e que veio questionar a nossa responsabilidade em relação às **gerações futuras**.
PCP	2009-07-23	António Filipe Gaião Rodrigues	Assim, todas as razões aconselham a que se não dê este passo negativo, a que esta decisão seja suspensa e seja estudado outro trajeto, em resultado do debate público alargado que tem de ser efectuado e, fundamentalmente, que este pulmão da cidade de Coimbra, como é a Mata do Choupal, seja efetivamente preservado. Há uma canção belíssima de José Afonso que começa com o verso «Do Choupal até à Lapa» e seria uma tristeza que as g**erações futuras** tivessem de a cantar dizendo «Do IC2 até à Lapa».
PCP	2016-07-06	Diana Jorge Martins Ferreira	O CDS que, tantas vezes se afirma pela solidariedade, quer acabar com a solidariedade **intergeracional** na segurança social e faz da guerra de gerações a base onde assenta a sua política e as suas propostas.

Party	Date	Speaker	Excerpt
PCP	2012-02-29	Miguel Tiago Crispim Rosado	Sr. Deputado, uma outra ideia particularmente grave é vir aqui tentar deixarnos a ilusão de que tudo se trata de solidariedade **intergeracional**, esse novo chavão da direita, como se estivessem a sacrificar os direitos da juventude atual, dos trabalhadores atuais e dos pensionistas atuais a bem dos trabalhadores jovens e pensionistas do futuro, escondendo que, na verdade, estão a beneficiar os grandes interesses do presente.
PAN	2017-05-09	André Lourenço e Silva	É neste sentido que são promovidas medidas como o sancionamento da utilização de venenos. Aliás, são entidades como o SEPNA (Serviço de Proteção da Natureza e do **ambiente**) e o ICNF (Instituto da Conservação da Natureza e das Florestas) que confirmam a morte de vários animais selvagens e domésticos decorrentes da utilização de venenos na atividade da caça.[…] Mas, se esta audição não é vinculativa, então, para que serve?! Para lançar areia para os olhos dos que compreendem que o desenvolvimento **sustentável** de Portugal passa por energias totalmente limpas e renováveis e não pela perpetuação de um modelo obsoleto assente em energias fósseis?!
PAN	2015-11-10	André Lourenço e Silva	Muitos são os riscos e os impactos que já se conhecem sem que haja qualquer vantagem para o consumidor, para o ambiente ou para as **gerações futuras**. Deve imperar o princípio da precaução, no mínimo, e até lá os OGM, os transgénicos devem ser proibidos.
PAN	2016-02-23	André Lourenço e Silva	A atividade do ser humano está a comprometer as **gerações futuras** e a sobrevivência das várias espécies, incluindo a humana. Temos de alterar práticas, devemos repensar consumos, necessitamos de novas políticas. O fim de um ciclo está a chegar, urge desenvolver e promover políticas integradas, políticas que, simultaneamente, defendam os interesses dos seres humanos, do planeta e daqueles que connosco o coabitam.
CDS-PP	1990-02-15	Narana Sinai Coissoró	Sr. Presidente, Srs. Deputados: A dignidade humana e a solidariedade são os valores da democracia cristã. A proteção e o respeito pelos valores do **ambiente** é inerente a estes ideais, pois o homem, enquanto criatura biológica, social e cultural, só existe como parte da natureza projectado no seu meio total. Desta realidade resulta o dever das consciências de atender às necessidades do nosso tempo e às **gerações futuras**, conciliando os imperativos da sociedade e da economia com o meio físico e vivo de que dependem mutuamente.

Party	Date	Speaker	Excerpt
CDS-PP	1998-03-26	Jorge Alexandre Silva Ferreira	Foi esse conflito, essa fratura que ficou bem marcada. O que se fez foi guardar esses atavismos, não querendo, de facto, fazer frente ao futuro e ao que é hoje um ato de justiça em relação às **gerações futuras** e, certamente, em relação aos mais fracos. Não podemos ficar alheios ao correr dos tempos. Em suma, Sr. Primeiro-Ministro, ficamos sem saber se estes documentos vão ou não constituir uma base de trabalho para um pacto de regime, se eles se vão ou não traduzir em propostas de lei;
CDS-PP	2012-12-19	Michael Lothar Mendes Seufert	E isso, Srs. Deputados, viola diretamente a Constituição da República Portuguesa, porque viola o princípio da dignidade da pessoa humana, porque não garante a **justiça intergeracional**.Os nossos jovens, as nossas crianças, os nossos filhos vão andar a pagar anos e anos a **dívida** pública portuguesa.
BE	2002-04-17	Luís Emídio Lopes Mateus Fazenda	Vou terminar, Sr. Presidente, dizendo que, como bem dito foi pela, ao tempo, Sr.ª Deputada Manuela Ferreira Leite, fez-se uma operação em leasing, exportando para **gerações futuras** obrigações que deveriam ter outro tipo de incidência orçamental, e a um crédito superior àquele que se praticava no mercado.
BE	2012-05-03	Catarina Soares Martins	Em terceiro lugar, Sr. Primeiro-Ministro, e não menos importante, pagar as suas obrigações é também pagá-las na hora devida e não mais tarde. Sabe, há pessoas que trabalham a recibo verde que ganham tão pouco que não conseguem pagar essas contribuições, mas, como não são Primeiro-Ministro, também mais tarde não conseguem pagar esses anos todos para se poderem reformar com a idade. Protestos do Deputado do PSD Hugo Lopes Soares. O Sr. Primeiro-Ministro comprou anos de reforma mas não foi solidário com as reformas atuais e, portanto, o Sr. Primeiro-Ministro negou essa obrigação básica, cidadã, da construção **intergeracional** da segurança social.
BE	2010-05-05	Jorge Duarte Gonçalves da Costa	Mas essa expectativa foi gorada. Percebemos hoje que o PS e o Governo insistem na sua teimosia quanto ao investimento público. É uma teimosia que vai ficar cara ao País, vai ficar cara aos portugueses, vai cara às **gerações vindouras**. É um fardo pesado.

Excerpts of speeches by speaker from the the various parties about sustainability.

Party	Date	Speaker	Excerpt
PSD	2011-12-07	Carlos Henrique da Costa Neves	O Grupo Parlamentar do PSD votará a favor da resolução proposta pelo Governo, convicto de que, embora chegando tarde, o mecanismo de estabilidade financeira é um elemento indispensável à **sustentabilidade** do euro, tão indispensável como insuficiente. São, aliás, as razões de indispensabilidade que nos levam a votar a favor.
PSD	2004-10-06	Luís Álvaro Barbosa de Campos Ferreira	Na minha opinião, este novo modelo a criar deve englobar a valência do tratamento e da divulgação da informação jurídica por suporte eletrónico, garantindo, assim, de um modo verdadeiramente sustentado, o acesso integrado e articulado aos conteúdos das várias bases de dados que compõem o Projecto Digesto. Para isso, de uma forma séria, como todos devemos atuar, é necessário aferir rigorosamente as necessidades tecnológicas, as melhores práticas internacionais, a **sustentabilidade** económico--financeira do modelo a implementar e, por último, mas não menos importante, assegurar a validade jurídica como meio de prova do suporte eletrónico.
PSD	2002-07-09	José Manuel Durão Barroso	Com a proposta de lei de bases da **segurança social** pretende-se assegurar, nomeadamente, a **sustentabilidade** financeira do sistema público de segurança social e a liberdade de escolha dos cidadãos, como acontece, aliás, em toda a Europa mais desenvolvida.
PS	2017-01-13	Luís Miguel da Graça Nunes	E nesse sentido, Sr.ª Deputada, o que é necessário é garantir que o Estado social funciona, que o S**erviço Nacional de saúde** funciona, que os serviços públicos funcionam. E era esse o compromisso que o PSD hoje deveria trazer aqui: o de que estava disponível para apoiar medidas que visassem a **sustentabilidade** do Estado social, que o Estado social correspondesse melhor aos desafios do presente e do futuro.
PS	2010-10-21	Maria Hortense Nunes Martins	E o PS acredita no desenvolvimento e no turismo **sustentável**. Acreditamos na compatibilização entre **ambiente** e desenvolvimento e achamos mesmo que é indispensável a boa preservação do nosso ambiente e da nossa diversidade, para enriquecer o nosso turismo.

Party	Date	Speaker	Excerpt
PS	2009-11-05	Maria de Belém Roseira Martins Coelho Henriques de Pina	Fi-lo nesta Assembleia muitas vezes, fi-lo fora da Assembleia sempre que tive oportunidade e fui sempre uma promotora da discussão com os titulares da pasta da saúde do apoio que tem de ser dado ao Governo na sua participação nos Conselhos Europeus de ministros da saúde no sentido de reconduzir a diretiva àquilo que ela, efetivamente, deve conter, ou seja, no sentido de garantir os melhores cuidados de saúde em tudo aquilo que cada um dos países não consegue assegurar, mas não contribuir para um agravamento das desigualdades em saúde, porque sabemos que são os cidadãos mais informados que recorrem aos mecanismos mais sofisticados e não podemos pôr os cidadãos mais informados, que, neste momento, já têm indicadores de saúde superiores, a beneficiar daquilo que, potencialmente, poderia ser individualmente interessante mas que, do ponto de vista coletivo, põe em causa a **sustentabilidad**e do sistema de **saúde**.
PEV	2013-07-12	Heloísa Augusta Baião de Brito Apolónia	Além do mais, Sr.as e Srs. Deputados, é muito triste estarmos perante um Governo que, face a erros absolutamente crassos, como foi o do aumento do IVA na restauração, não consiga fazer sequer esse «remendozinho» nas medidas que tomou, ou seja, retificando o que seria tão fácil e que é tão óbvio que foi uma machadada na nossa economia e na delapidação da nossa economia. Quando o Governo nem tem capacidade para ir a estes pormenores e a estes erros crassos, de facto estamos perante um Governo que não serve rigorosamente para nada no que se refere à **sustentabilidade** do País.
PEV	2008-11-07	Francisco Miguel Baudoin Madeira Lopes	Quando o Governo decidiu a baixa de salários, o agravamento de reformas e pensões, o congelamento de carreiras, despedimentos na função pública, quando o Governo cortou, ao longo de três anos, no investimento público de qualidade, privando não só o País de infra-estruturas importantes como a economia da alavanca pública, quando o Governo poupou em despesas sociais, como a **saúde** ou a **educação**, quando o Governo aumentou impostos, ao contrário do que tinha prometido, quando deixou o tecido produtivo degradar-se, assistindo impávido ao encerramento de empresas e ao agravamento do desemprego, ao mesmo tempo que, agora, reduz a abrangência do subsídio de desemprego, agrava a nossa dependência do exterior a todos os níveis, designadamente energético, alimentar e de bens de consumo, quando o Governo negligenciou a tomada de medidas de aumento da poupança e eficiência energéticas, quando o Governo prossegue a sua senda de privatizações e de desresponsabilização do Estado em áreas fundamentais, o que o Governo de José Sócrates fez, e faz, é fragilizar a sociedade e a economia portuguesas, é fragilizar o País que, assim, está menos preparado para enfrentar esta crise mundial.[…] Presidente, Sr.as e Srs. Deputados: O País precisava de voltar a acreditar, a ter esperança num futuro melhor, por isso este país precisa de mudar e de exigir políticas conformes ao desenvolvimento **sustentável**.

Party	Date	Speaker	Excerpt
PEV	2002-11-13	Isabel Maria de Almeida e Castro	Precisamente o que queremos com esta proposta é que uma parte da verba resultante do Imposto sobre Produtos Petrolíferos seja destinada ao investimento em transportes públicos, que, naturalmente, serão sempre deficitários, pelo que carecem desta proposta, seja utilizada para reforçar, melhorar e modernizar a frota circulante, adaptando-a do ponto de vista ambiental, e para inverter uma tendência que nosso país ainda está longe de ser invertida, dando-se prioridade ao transporte público em detrimento do transporte privado e a um sistema de transportes eficaz, moderno e seguro, que manifestamente hoje não temos (muito menos ambientalmente **sustentável**).[…] É este o sentido da proposta que fazemos. Sr.ª Presidente e Srs. Deputados, todo este conjunto de propostas visa beneficiar, ao nível do imposto automóvel, a aquisição de veículos que, do nosso ponto de vista e numa perspetiva de futuro, é fundamental introduzir com maior e mais significativo peso na nossa frota circulante. São propostas que visam beneficiar e, dessa forma, favorecer o gradual consumo de combustíveis amigos do **ambiente**, operando desta forma uma transformação que no nosso país tarda em fazer-se.
PCP	2013-12-04	Miguel Tiago Crispim Rosado	Ora, não deixa de ser curioso que o mesmo Governo que diz sempre que não é preciso haver preocupação, porque a **dívida** é **sustentável** e que é possível pagá-la nos prazos definidos, venha agora vangloriar-se por ter conseguido, por mais dinheiro, por mais juros, protelá-la porque afinal não era benéfico para o País pagá-la nesta altura. É uma contradição que também merece algum destaque.
PCP	2006-07-12	Jerónimo Carvalho de Sousa	É esta política que permite e garante a brutal contradição que se exprime na comparação entre o desmesurado crescimento dos lucros da banca em 2005 e as dificuldades crescentes da generalidade das micro, pequenas e médias empresas das diversas áreas económicas, em particular dos setores produtivos. Talvez por isso, também estejamos a assistir ao aumento **insustentável** do **endividamento** das famílias e das empresas não financeiras.
PCP	2000-12-06	Joaquim Manuel da Fonseca Matias	o quadro da nova lei de bases do ordenamento do território, aprovada por esta Assembleia há cerca de dois anos e meio, e do novo regime jurídico dos instrumentos de gestão territorial, aprovado há cerca de um ano, este diploma completa um edifício legislativo que deverá, do ponto de vista do PCP, definir e orientar as linhas programáticas do desenvolvimento **sustentável** do nosso país, orientado para a melhoria da qualidade de vida da nossa população.[…] Não nos resta muito tempo e espaço para salvaguardar o nosso património e garantir a defesa do meio **ambiente** e da qualidade de vida das nossas populações.

Party	Date	Speaker	Excerpt
PAN	2017-05-09	André Lourenço e Silva	É neste sentido que são promovidas medidas como o sancionamento da utilização de venenos. Aliás, são entidades como o SEPNA (Serviço de Proteção da Natureza e do **ambiente**) e o ICNF (Instituto da Conservação da Natureza e das Florestas) que confirmam a morte de vários animais selvagens e domésticos decorrentes da utilização de venenos na atividade da caça.[…] Mas, se esta audição não é vinculativa, então, para que serve?! Para lançar areia para os olhos dos que compreendem que o desenvolvimento **sustentável** de Portugal passa por energias totalmente limpas e renováveis e não pela perpetuação de um modelo obsoleto assente em energias fósseis?!
PAN	2016-11-05	André Lourenço e Silva	Considerando o contexto em que este Orçamento se apresenta e esta necessidade de obtenção de receita, considerando que para fazer face à profunda recessão ecológica em que vivemos e para cumprir metas de **sustentabilidade**, precisamos alterar hábitos e de iniciar uma trajetória de adoção de uma verdadeira justiça fiscal sobre todas as atividades que não internalizam custos. […] As políticas **agrícolas** têm que se renovar urgentemente, Srs. Ministros! As exigências dos consumidores, dos cidadãos e do **ambiente** assim o ditam e Portugal está a resistir, continua a resistir!
PAN	2016-01-20	André Lourenço e Silva	É fundamental defender uma **agricultura sustentável**, orientada para a proteção da biodiversidade e do direito dos povos à soberania sobre o seu património genético e alimentar comum. Os impactos ambientais dos transgénicos atualmente produzidos no nosso País são vários e com um enquadramento técnico complexo. As toxinas produzidas interferem de forma hostil nos ciclos naturais de vários insetos e organismos auxiliares ao desenvolvimento da agricultura e da vida.
CDS-PP	2012-03-21	Luís Pedro Russo da Mota Soares	O Memorando foi necessário porque tínhamos um défice a hipotecar o futuro; uma despesa pública a onerar o presente; e uma **dívida** a descredibilizar o País. Não foi uma opção; tratou-se da única via para Portugal evitar a insolvência. Inverter este rumo, a bem da reconquista da **sustentabilidade** nacional, era fundamental.
CDS-PP	2012-01-26	Teresa Margarida Figueiredo de Vasconcelos Caeiro	Sr. Deputado Miguel Santos, isto vem demonstrar a determinação, a coragem e o verdadeiro empenho, por parte deste Governo e do Ministério da saúde, em fazer as reformas que são necessárias para assegurar a **sustentabilidade** do **Serviço Nacional de saúde**, que todos pretendemos que continue universal, geral e tendencialmente gratuito, tendo em conta as condições socioeconómicas do utente.

Party	Date	Speaker	Excerpt
CDS-PP	2012-02-08	João Manuel de Serpa Oliva	Não passou pelo argumentário do Bloco de Esquerda a hipótese de ser exatamente para salvaguardar a função social do Estado que esta medida é tomada?! Que passa por aqui o sentido de uma integração orçamental e económica mais estreita e irrevogável e uma governação mais forte na zona do euro?! Que o acordo melhorará significativamente as perspetivas, no que se refere à **sustentabilidade** orçamental e à **dívida** soberana na área do euro, favorecendo o crescimento?! Que o acordo, ao criar o mecanismo europeu de estabilidade – instrumento que será permanente para a resolução de crises e que contribuirá para aumentar a confiança, a solidariedade e a estabilidade financeira na área do euro –, tem como objetivo proteger os Estados na crise atual?! E que, por via disto, o articulado do acordo tem em vista a salvaguarda e não a restrição da função social do Estado, através da sua solvência financeira.
BE	2015-11-09	Catarina Soares Martins	Quando olhamos para as outras prioridades do Programa, aí temos verdadeiramente o humor negro: é o Estado responsável; próximo das pessoas; amigo da economia; garantir **sustentabilidade**; aprofundar Estado de direito; e afirmar Portugal no mundo. Isto foi escrito pelo Governo que não fez mais do que ser bom aluno de Berlim, pelo Governo que não conseguiu fazer nenhum Orçamento do Estado que respeitasse a Constituição da República Portuguesa, pelo Governo que triplicou a **dívida**, pelo Governo que acabou 2014 com o mesmo défice que existia em 2011, pelo Governo que fez a pobreza infantil ficar em números do século passado e fez o PIB recuar duas décadas.
BE	2012-05-03	Mariana Rosa Aiveca	Sr. Presidente, Srs. Membros do Governo, Sr.as e Srs. Deputados: A primeira questão que pode colocar em causa – e coloca – a **sustentabilidade** da **segurança social** é o desemprego, porque sem contribuintes e sem beneficiários não há sustentabilidade da segurança social.
BE	2009-05-07	Alda Maria Gonçalves Pereira Macedo	Na verdade, a arte extraordinária que é a arte circense deve, hoje, começar a dar o primeiro e significativo passo no sentido de ser multifacetada, complexa e corresponder a uma nova era na forma como nós, seres humanos, respeitamos a natureza diversa dos animais. Respeitando essa natureza, percebemos que a **sustentabilidade** das sociedades humanas passa pela sustentabilidade dos recursos naturais e, nesse sentido, pelo respeito pela natureza dos outros seres vivos que connosco coabitam este maravilhoso ecossistema que nos é dado usufruir.

5.3.
APPENDIX III – MEMBERS OF PARLIAMENT WITH THE LARGEST ABSOLUTE NUMBER OF SPEECHES ON SDD

Table 5.1.
Speakers with a major number of speeches about sustainability

Party	Name	Number of speeches
BE	Luís Emídio Lopes Mateus Fazenda	26
BE	Alda Maria Gonçalves Pereira Macedo	41
BE	Mariana Rosa Aiveca	36
BE	Mariana Rodrigues Mortágua	31
CDS-PP	Teresa Margarida Figueiredo de Vasconcelos Caeiro	34
CDS-PP	Luís Pedro Russo da Mota Soares	46
CDS-PP	João Rodrigo Pinho de Almeida	35
PCP	Artur Jorge da Silva Machado	47
PCP	José Honório Faria Gonçalves Novo	32
PS	Luísa Maria Neves Salgueiro	10
PS	Jorge Lacão Costa	11
PS	Teixeira dos Santos	12
PS	Jorge Manuel Monteiro de Almeida	8
PS	Maria José Guerra Gamboa Campos	12
PS	Hugo Miguel Carvalheiro dos Santos Costa	10
PS	Luís Miguel Morgado Laranjeiro	14
PS	José Carlos das Dores Zorrinho	14
PS	Luís Filipe Marques Amado	14
PS	Manuel Pedro Cunha da Silva Pereira	13
PS	Pedro Manuel Dias de Jesus Marques	10
PS	Jorge Filipe Teixeira Seguro Sanches	9
PS	Eduardo Arménio do Nascimento Cabrita	10
PS	Francisco Nunes Correia	9
PS	Maria Amélia do Carmo Mota Santos	9
PS	Maria de Belém Roseira Martins Coelho Henrique...	15
PS	Eduardo Luís Barreto Ferro Rodrigues	9

PS	Jovita de Fátima Romano Ladeira	8
PS	Guilherme Valdemar Pereira de Oliveira Martins	8
PS	Manuel Francisco Pizarro de Sampaio e Castro	8
PS	António Lacerda Sales	8
PS	João Paulo Moreira Correia	8
PS	Francisco Jose Ferreira da Rocha	10
PS	José António Fonseca Vieira da Silva	15
PS	Maximiano Alberto Rodrigues Martins	8
PS	José Vieira da Silva	19
PS	Pedro Filipe Mota Delgado Simões Alves	15
PS	Joel Eduardo Neves Hasse Ferreira	16
PS	Augusto Ernesto Santos Silva	26
PS	Pedro Manuel Farmhouse Simões Alberto	16
PS	Alberto de Sousa Martins	33
PS	António José Martins Seguro	25
PS	Jorge Manuel Capela Gonçalves Fão	15
PS	João Saldanha de Azevedo Galamba	27
PS	Sónia Ermelinda Matos da Silva Fertuzinhos	24
PS	Luís Afonso Cerqueira Natividade Candal	30
PS	Ana Paula Mendes Vitorino	18
PS	José Sócrates Carvalho Pinto de Sousa	43
PS	Maria Hortense Nunes Martins	23
PS	António Luís Santos da Costa	19
PS	Renato Luís de Araújo Forte Sampaio	21
PSD	António Egrejas Leitão Amaro	15
PSD	Luís Maria de Barros Serra Marques Guedes	8
PSD	Paulo César Lima Cavaleiro	9
PSD	António Bagão Félix	8
PSD	António Joaquim Almeida Henriques	8
PSD	Luís Manuel Morais Leite Ramos	8
PSD	Luís Filipe Valenzuela Tavares Menezes Lopes	8
PSD	Maria Ofélia Fernandes dos Santos Moleiro	8
PSD	Cristóvão da Conceição Ventura Crespo	8
PSD	Luís Filipe Montenegro Cardoso de Morais Esteves	48
PSD	Adão José Fonseca Silva	48

PSD	Ângela Maria Pinheiro Branquinho Guerra	8
PSD	Nilza Marília Mouzinho de Sena	8
PSD	Maria das Mercês Gomes Borges da Silva Soares	8
PSD	Maria Clara de Sá Morais Rodrigues Carneiro Ve...	8
PSD	Luís Miguel Pereira de Almeida	8
PSD	Joana Catarina Barata Reis Lopes	9
PSD	António Pedro Roque da Visitação Oliveira	9
PSD	Adriano Rafael de Sousa Moreira	24
PSD	José Alberto Vasconcelos Tavares Moreira	9
PSD	Paulo Miguel da Silva Santos	14
PSD	Paulo Jorge Frazão Batista dos Santos	14
PSD	Duarte Rogério Matos Ventura Pacheco	13
PSD	José Eduardo Rego Mendes Martins	17
PSD	Nuno Filipe Miragaia Matias	12
PSD	Carlos Manuel dos Santos Batista da Silva	12
PSD	Nuno Rafael Marona de Carvalho Serra	12
PSD	Maria Luís Casanova Morgado Dias de Albuquerque	19
PSD	Sérgio Monteiro	11
PSD	Pedro Augusto Lynce de Faria	11
PSD	Teresa de Andrade Leal Coelho	11
PSD	Jorge Manuel Lopes Moreira da Silva	11
PSD	Vitor Gaspar	11
PSD	Maria Manuela Dias Ferreira Leite	10
PSD	Miguel Jorge Reis Antunes Frasquilho	20
PSD	Bruno Manuel Pereira Coimbra	10
PSD	José Manuel Durão Barroso	10
PSD	Paulo Macedo	10
PSD	Fernando Nuno Fernandes Ribeiro dos Reis	9
PSD	Ana Maria Sequeira Mendes Pires Manso	9
PSD	Pedro Manuel Mamede Passos Coelho	63

5.4.
APPENDIX IV – COLUMNISTS WHO MENTION IJ

Table 5.3.
Opinion text authors with mentions to IJ

Newspaper	Columnist	Number of mentions (IJ)
CM	Armando Esteves Pereira	7
CM	Octávio Ribeiro	4
CM	Reginaldo Rodrigues de Almeida	3
CM	Ricardo Rio	3
CM	João Pereira Coutinho	2
CM	Rui Pereira	2
CM	Fernanda Palma	2
CM	Almeida Henriques	2
CM	Luís Campos Ferreira	2
Expresso	Daniel Oliveira	5
Expresso	João Vieira Pereira	4
Expresso	Cartas dos leitores	4
Expresso	Nicolau Santos	3
Expresso	Clara Ferreira Alves	2
Expresso	Miguel Sousa Tavares	2
Expresso	Luis Marques	2
Expresso	Reginaldo Almeida	2
Expresso	José Tolentino Mendonça	2
Expresso	Miguel Monjardino	2
Expresso	Editoriais	2
Expresso	Henrique Raposo	2
Público	Jorge Miguel Bravo	7
Público	Filipe Duarte Santos	4
Público	Rui Tavares	4
Público	Paulo Trigo Pereira	3
Público	Gonçalo Calado	3
Público	Paulo Rangel	3

Público	Pedro Sousa Carvalho	3
Público	José Jorge Letria	3
Público	António Bagão Félix	3
Público	Editorial	2
Público	Gustavo Cardoso	2
Público	Fernando Tenreiro	2
Público	Paulo Martins Barata	2
Público	Maria Amélia Martins-Loução	2
Público	Teresa de Sousa	2
Público	Carla Martins Branco	2
Público	José Pedro Teixeira Fernandes	2
Público	Rute Lima	2
Público	Maria Margarida Corrêa de Aguiar	2
Público	Carlos Pereira da Silva	2
Público	João Miguel Tavares	2
Público	João Pedro Castro Mendes	2
Público	Luis Teles Morais	2
Público	Frei Bento Domingues O. P.	2