

## **Three sides of the same coin?**

### **Comparing party positions in VAAs, expert surveys and manifesto data**

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#### **Abstract**

Existing research on political parties' policy positions has traditionally relied on expert surveys and/or party manifesto data. More recently, Voting Advice Applications (VAAs) have been increasingly used as an additional method for locating parties in the policy space, with a closer focus on concrete policy issues. In this manuscript, we examine the reliability of party positions originated from a VAA, utilizing the euandi longitudinal dataset, which provides data on positions of over 400 unique political parties across 28 EU member states from the European Parliament elections of 2009, 2014 and 2019. We cross-validate euandi data with the Comparative Manifesto Project (CMP) and the Chapel Hill Expert Survey (CHES). Our results attest the reliability of the euandi trend file vis-à-vis remaining data sources, demonstrating the validity of VAA-based methods to estimate the policy positions of European political parties. Convergence is especially high with CHES party placements. We also explore the sources of divergence in the estimation of policy positions across the three methods, finding little evidence of a systematic source of bias in the estimates between datasets. We conclude with an inventory of arguments in favour of party position measurements used by VAAs for the study of policy making in European democracies.

**Keywords:** expert surveys; manifesto analysis; party placement methods; policy positions; Voting Advice Applications (VAAs)

## **Introduction**

An adequate representation of political parties' policy positions is a key element to understand public policy, particularly when employing comparative approaches. Since 'data on the positioning of political parties are vital in evaluating hypotheses on how public policy is shaped by political parties with different agendas' (Marks, 2007: 2), European scholarship has for long engaged in efforts geared at perfecting a method to reliably measure parties' policy stances. First attempts at empirically establishing party positions started to materialise in the 1970s, with an initial approach relying on perceptions of party positions held by citizens or political elites (Trechsel & Mair, 2011: 3). Two additional types of techniques for measuring party positions developed over time, both of them relying on the expertise of non-partisan specialists: expert surveys and party manifesto coding. Ever since the works of Morgan (1976), and Castles and Mair (1984), expert surveys have proliferated and became a widely used source, offering accurate data on parties' positions based on the judgement of trained specialists in the field (Benoit & Laver, 2007). The most well-known and powerful effort of expert surveys is constituted by the Chapel Hill Expert Survey (CHES), founded in 1999. The second technique, manifesto coding, is based on documents emanated from parties themselves coded by non-partisan experts. The most prominent example in this respect is the Comparative Manifesto Project (CMP), which has been compiling manifesto data for multiple countries going back to 1945.

More recently, Voting Advice Applications (VAAs) have emerged throughout modern, liberal democracies. A common feature to the wide range of different forms of VAAs is their ability to position parties in the policy space. To do so, VAAs typically make use of a combination of the previously described techniques. Also, they generally distinguish themselves from the other methods through an even closer focus on concrete policy issues (Garzia & Marshall, 2014; 2019).

While VAAs have predominantly been perceived as educational tools for citizens, with the advent of systematically repeated VAAs across time, their measurements of party positions have become an additional source for determining policy stances of political parties and for mapping political spaces. Despite the growing scientific interest towards VAAs, very little research has thus

far studied how well party position measurements embedded in VAAs converge with the other prominent methods of party placement. Previous studies have indeed provided comparisons of VAA data with expert surveys or manifesto data. Notwithstanding their contributions, we argue that these efforts suffer from two limitations: a) they do not systematically triangulate the three methods, evaluating their relative performances, convergences and divergences; and b) they are either cross-sectional (Gemenis, 2013a; Gemenis, 2013b) or concern a small number of countries (Wagner & Ruusuvirta, 2012; Gemenis & Van Ham, 2014), thus possibly suffering from context-specific issues due to the few election campaigns considered, therefore being less suitable to comprehensively evaluate the method itself.

In this contribution, we aim at addressing this gap in research and try to answer the following research questions: Are VAA-proposed party position measurements reliable methods? How do, in this respect, VAAs compare to expert surveys and manifesto analysis? And finally, how can we explain similarities and differences in party position measurements between VAAs and the other two methods?. We focus on a particular set of measurements stemming from the three consecutive editions of **euandi** – a pan-European VAA developed by the European University Institute in Florence (Italy) in the wake of the last three European Parliament elections of 2009, 2014 and 2019<sup>i</sup>. The large dataset spanning a decade, three elections, hundreds of parties and thousands of policy positions will be cross-validated against the ‘classic’ party position measurements provided by the CHES and the CMP. We find that the method of party placement used in this set of VAA data is both accurate and reliable. The party positions measured by these three VAAs in the wake of the European Parliament elections represent a complementary and legitimate data source for analyses of the European political space.

### **Early VAAs, early cross-validations**

VAAAs are independent platforms matching citizens' policy preferences with the policy stances taken by political parties. First introduced in the late 1990s, they quickly spread both in the geographical coverage of countries and in the number of users. The German *Wahl-o-Mat* and Dutch *Stemwijzer* are among the most established VAAs and typically register several million users during an election campaign, attracted by the ability to intelligibly translate the complex constellation of parties' policy positions. Beyond acting as tools matching voters with political parties, 'by placing political parties on overarching political dimensions (...), VAAs partake in the same endeavour as other more conventional methods of party positioning like manifesto coding, expert surveys and public opinion aggregation' (Reiljan et al., 2019: 651). Arguably the most innovative aspect of VAAs in the measurement of party positions is their ability to combine expert assessments, textual analyses of a broader set of documents (manifestos; party documentation; press coverage; roll-call behaviour, etc.) and, in some instances, even the parties' own input. It is this *combination of techniques* that can be seen as a VAA-specific method – usually based on fully documented sources - to estimate the policy positions of political parties. VAAs that combine the traditional approaches thus constitute an additional and distinct instrument to measure policy positions of political parties.

A particular characteristic of VAAs is their concrete focus on *policies* rather than *latent dimensions*. While 'most expert, elite and mass surveys ask respondents to place parties directly on interval scales, which represent the latent dimensions of interest' (Gemenis, 2013a: 270), VAAs position parties relative to specific policy statements. Furthermore, by combining data on users' policy preferences and parties' positions on the exact same policy items, VAAs establish a clearer nexus between political supply and demand, going beyond other methods in allowing practitioners to directly compare citizens' and parties' policy positions (McDonnell & Werner, 2019: 1765). VAAs can thus potentially offer a unique contribution for research on political parties, public policy, and public opinion, but only inasmuch as they are able to accurately and reliably measure the policy positions of political parties.

In order to assess the quality of data on party positions, one arguably needs to compare different forms of data sources in a cross-validation exercise. This is what has been undertaken in several studies that compared manifesto coding and expert surveys. For instance, Keman (2007) compared positions on the left-right and progressive-conservative dimensions, raising questions about internal and external validity. Benoit and Laver (2007) contrasted estimates from their expert survey with data from the Comparative Manifesto Project (CMP) revealing some agreement but also inconsistencies. More recently, Bruinsma and Gemenis (2017) have shown that estimates combining mass and expert surveys outperform the CMP for a two-dimensional space. Yet, comparisons using specifically the Chapel Hill Expert Survey (CHES) and CMP generally tend to exhibit a relatively high correlation between the two sources (e.g., Bakker et al., 2015a; Hooghe et al., 2010).

Although cross-validation efforts involving CHES and CMP have been frequent, we still know little about how their measures compare to VAAs. Gemenis and van Ham (2014) have critically examined and compared the several methodologies adopted by VAAs to estimate party positions – party self-placement, conventional expert surveys, the *Kieskompas* method, and the Delphi method. Gemenis (2013a) expanded the comparison beyond the VAA realm, to directly compare 2009 EU Profiler positions with a non-VAA data source: the 2006 CHES survey; and, in another instance, also with the closest observation of CMP data in the 2005-2010 period (Gemenis, 2013b). Wagner and Ruusuvirta (2012) compared policy positions from 13 VAAs in seven European countries with policy measures from expert surveys of various sources and 1990-2003 CMP data on left-right economic positions, immigration, and environment measures.

Despite these valuable insights, we still lack a systematic longitudinal triangulation of party positions embedded into VAAs with alternative methods of placing parties in the political space. Gary Marks (2007: 2) argues that accuracy can be increased by better measurement tools or by an increase in the volume of information, ‘for example, by increasing the number of cases in a sample, or (...) by comparing the datasets that contain observations of the same case or cases’. The present effort aims at bringing to the table a new method which can potentially have better measurement tools, but

especially, at increasing the volume of information by extending the scope of the comparison both geographically and longitudinally across three data sources. In the words of King, Keohane and Verba (1995: 479–480), ‘the best method should be chosen for each data. But more data are better. Triangulation, then, is another word for referring to the practice of increasing the amount of information to bear on a theory or hypothesis’.

In this contribution, we make use of the euandi longitudinal dataset and compare it to the two most prominent, classic data sources used to estimate party positions: CHES and CMP. This allows for a triangulation between data stemming from three different methods: expert coding of VAAs complemented with an iterative method of party self-placement, classic expert surveys, and party manifesto analysis. Each of these data gathering strategies carries strengths and limitations, so it is relevant to analyse how they compare across the same dimensions. In going beyond pre-existing studies by expanding on the number and type of data sources for cross-validation, as well as on the longitudinal scope of the triangulation efforts, we can better compare similarities and divergences across methods. By doing so, we are in a better position to ascertain the reliability of VAA party positions vis-à-vis established methods of placing parties in the political space.

### **Using VAAs to place parties in the policy space: The euandi longitudinal dataset, 2009-2019**

Researchers have for long explored different methods to empirically determine policy spaces. So far, and as mentioned above, these have been established based on three main sources. First, the policy positions as described by political parties themselves in their manifestos, parliamentary debates, or other types of official documents. Second, expert perceptions of parties’ policy positions, by means of expert surveys. Third, perceptions of policy positions derived from either mass public opinion surveys or elite surveys. More recently, VAAs have been added to this list of data sources, frequently combining several elements of the different methods (Trechsel & Mair, 2011).

VAAAs now provide a vast amount of data on party positions on numerous policy issues and political dimensions, covering multiple countries over consecutive points in time. Yet, unlike other methods frequently used to map parties' positions, these data sources are usually scattered across countries and over time, thus hindering their potential for comparative research. For this reason, VAA data has rarely been able to provide more than snapshots of given political realities, for which it is often rejected in favour of expert survey data or manifesto data.

The euandi dataset emerged as a response to these limitations, cumulating data collected for three subsequent pan-European Voting Advice Application (VAA) projects, each corresponding to one European Parliament election: the EU Profiler (2009), and euandi (2014, 2019) (Reiljan et al., 2020b). It builds on the first transnational VAA and is the largest dataset of party positions' measurements embedded within VAAAs, allowing for comparative and longitudinal analyses. The dataset includes all the 'relevant' parties in each of the 27 EU countries and the UK, that is, all the parties already represented in the European Parliament, as well as those that were credited with at least 1% of the popular vote in the polls preceding the respective EP election. Table 1 contains basic information on the three data collection waves. For more information on the dataset, see Reiljan et al. (2020a).

**Table 1.** The euandi longitudinal dataset: Summary statistics

	N
Data collection waves	3
Countries	28
Political parties	411
Political parties present in all 3 waves	141
Policy statements	42
Policy statements present in all 3 waves	15



In each wave, the parties across all the countries were positioned on a set of identical policy statements. For each policy statement, the parties were placed on a five-point Likert scale, based on their degree of (dis)agreement with the respective statement. In case the party had no discernible position on the statement, it was coded as having ‘no opinion’. In 2009 and 2014, parties were coded also on two country-specific statements; in 2019, all statements were identical for every country. Altogether, the dataset contains party positions on 42 different statements; 15 of these were present in all three waves, allowing for a direct comparison over a time span of ten years. While some statements remain pertinent across the three elections (e.g. ‘Government spending should be reduced in order to lower taxes’), others have arguably lost saliency over time (e.g. ‘The European Union should be enlarged to include Turkey’) and have been replaced by policy items that more accurately reflect the political conflict in the context of that election (e.g. ‘Asylum seekers should be distributed proportionally among EU Member States through a mandatory relocation system’). Table C1, in the Appendix presents the full list of euandi policy statements and details the continuous statements (i.e. present in all three waves, 2009, 2014 and 2019).

In addition to capturing political parties’ stances on the specific policy issues, most statements were also aimed at measuring broader political dimensions. With very few exceptions, the policy statements were attached to one of three overarching dimensions: the socioeconomic left-right, the cultural liberal-conservative (GALTAN) and the pro-/anti-EU integration dimensions. Factor analyses conducted after the data collection waves have confirmed the described three-dimensional structure of the data. The *a priori* decisions regarding which statement should be assigned to which dimension have, in most cases, proven to be valid (Garzia et al., 2015; Michel et al., 2019; Reiljan et al., 2019a).

According to Marks and colleagues (2007: 26-27), expert data may suffer from issues related to inter-coder reliability; information asymmetry regarding the different political parties depending, for example, on their saliency; ex-post contamination of retroactive judgements; and conflating

preferences and behavior. Most of these limitations are similarly identified by Krouwel and van Elfrinkhof (2014), who further note that expert data may be particularly problematic for longitudinal data collection efforts, since it tends to produce stable party positions over time. Curini (2010) adds that expert data is prone to projection biases, according to which experts' judgements may be contaminated by their preferences. Despite these caveats, Marks and colleagues argue that expert survey data has the merit of offering a direct quantification through the use of structured scales; allowing data collections on issues and topics that are not necessarily covered in official party documentations; and, by going beyond official party documentation, increasing validity through a diversification of sources. Expert surveys are also recognizably cost-effective instruments, allowing for the integration of information from a plurality of sources on a variety of dimensions.

Manifesto data, on the other hand, rely on information intentionally divulged by political parties. Since parties use these documents to present themselves, they are unlikely to include any information deemed sensitive from a strategic point of view. Hence, manifestos often entail a selected, partial coverage of policy dimensions. As they are the expression of party consensus, manifestos are also hardly representative of eventual policy divergencies within political parties. Finally, previous research has highlighted the vagueness inherent to these documents, while also noting that manifestos vary greatly in their nature across political parties and across countries, particularly with regard to their format, substance of content, length, scope, as well as regarding the party personnel responsible for the drafting of the manifesto (Krouwel & van Elfrinkhof, 2014). Yet, the main criticism subjacent to this type of data source concerns the arguably unrealistic assumption equating saliency to position that generally pervades the use of manifesto data for estimating party positions (Dolezal et al., 2014). Laver and Garry (2000: 620) rightly warn on these grounds that 'position and emphasis are quite distinct parameters of party policy. Two parties may have quite different substantive positions on the same issue, but emphasise this issue to precisely the same extent in their respective manifestos'. Another fundamental critique of manifesto coding regards the issue of inter-coder reliability. Examining this issue in the CMP dataset, Mikhaylov et al. (2017) register

fairly low levels of inter-coder agreement, even among more experienced coders. On the brighter side, because it relies on publicly available official documentation, manifesto data facilitates comparison and replicability. Since they usually date back to the party’s foundation, their time series cover a party’s entire lifespan. As strategic documents, manifestos offer strong evidence of the salience of issues for political parties, also distinguishing between intentions and behaviour.

The iterative method used by euandi (and other VAAs) was first introduced by the Dutch *Kieskompas* in 2006. The key element of this method is the inclusion of parties themselves in the positioning process. In euandi, parties included in the VAA were contacted with an official invitation letter and the list of policy statements (both translated into the predominant, official language of each country). Parties then had the chance to record their documented self-placements on each policy position within a dedicated, web-based form. Country teams, composed of experts, compared these party-generated positions with their own expert-judgements and, in case of discrepancies, asked the respective party to provide more support for its recorded position. After this calibration phase, the experts and the party reached a consensus and final positions on the statements were confirmed. In case the party did not react, or disagreement subsisted, the positions were determined solely by the country teams.

In the first edition of the VAA in 2009, the party co-operation rate remained under 40 percent, whereas in 2014 and 2019 it was consistently above 50 percent. Table 2 details party co-operation rates by region across all three waves of data collection (country-by-country rates in Table A1, in Appendix).

**Table 2.** Degrees of party cooperation in the euandi longitudinal dataset, by macro-region

2009			2014			2019		
N	%	N	N	%	N	N	%	N
Parties	Cooperated	Experts	Parties	Cooperated	Experts	Parties	Cooperated	Experts

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Total	175	49.9%	(72)	154	61.3%	(85)	175	60.4%	(86)
West									
Total	85	23.4%	(38)	88	46.1%	(52)	99	44.4%	(51)
CEE									
Total	260	39.5%	(110)	242	55.0%	(137)	274	54.3%	(137)
EU28									

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This iterative procedure aims at maximizing the strengths and minimizing the weaknesses of other methods (Trechsel & Mair, 2011; Krouwel & van Elfrinkhof, 2014; Garzia et al., 2017). A distinctive feature *vis-à-vis* expert surveys and manifesto coding is the focus on an updated set of policy issues salient at election time. The dynamic consideration of the policies takes into account the changing patterns of issue competition across elections, helps to more effectively discriminate between parties within the same bloc, and provides a more fine-grained picture of the policy space. Policy statements also tend to exclude valence issues in favour of more politically discriminating policy considerations, framed in multiple directions so as to reflect the trade-offs inherent to each policy (e.g. ‘Renewable sources of energy should be supported even if this means higher energy costs’). The data sources for the textual analysis also go beyond those typically considered in manifesto coding, extending to other official party documents, actions/statements of party representatives in office, interviews and press releases, or EU manifestos, so as to reduce the risk of not being able to code a party’s position on a given policy. Finally, an additional advantage is the fully documented nature of the policy positions, supported with references to quotes from concrete sources, and accessible to every user of the VAA, thus maximising transparency behind the coding effort.

## Triangulating VAA data with expert surveys and manifesto analysis

Before triangulating the different data sources, one needs to address an initial complexity of data content. The euandi data is made up of party positions regarding detailed policy statements, while CHES and CMP operate at a higher level of abstraction, relying mostly on dimensions of political conflict rather than on individual policies. Hence, we have grouped the euandi policy statements into comparable dimensions, i.e. the Left-Right, the Pro-Anti EU integration and the GALTAN dimensions (as detailed in Table C1, in Appendix) and compared the estimates with CHES and CMP across these dimensions. Whenever the years of publication of CHES and CMP data did not match the European election years comprised in the euandi dataset, we have taken the data from the closest year available (details on matching years available in Table A2, in Appendix).

To maximise conceptual homogeneity, the euandi dimensions were constructed using exclusively the policy statements continuously present in all three waves (as described in Table C1). For the same reason, in the construction of the Left-Right, Pro-Anti EU integration and GALTAN dimensions in the CHES and CMP datasets, we have aimed at including variables tapping into the same topics as in euandi statements used to build the dimensions.<sup>ii</sup>

For CMP, we constructed the three dimensions as follows<sup>iii</sup>:

$$CMPLR = \frac{((per505 - per504) + (per401 - per403) + (per402 - per409))}{3}$$

$$CMPEU = per108 - per110$$

$$CMPGALTAN = \frac{((per410 - per416) + (per601 - per602) + (per603 - per604) + (per605) + (per608 - per607))}{5}$$

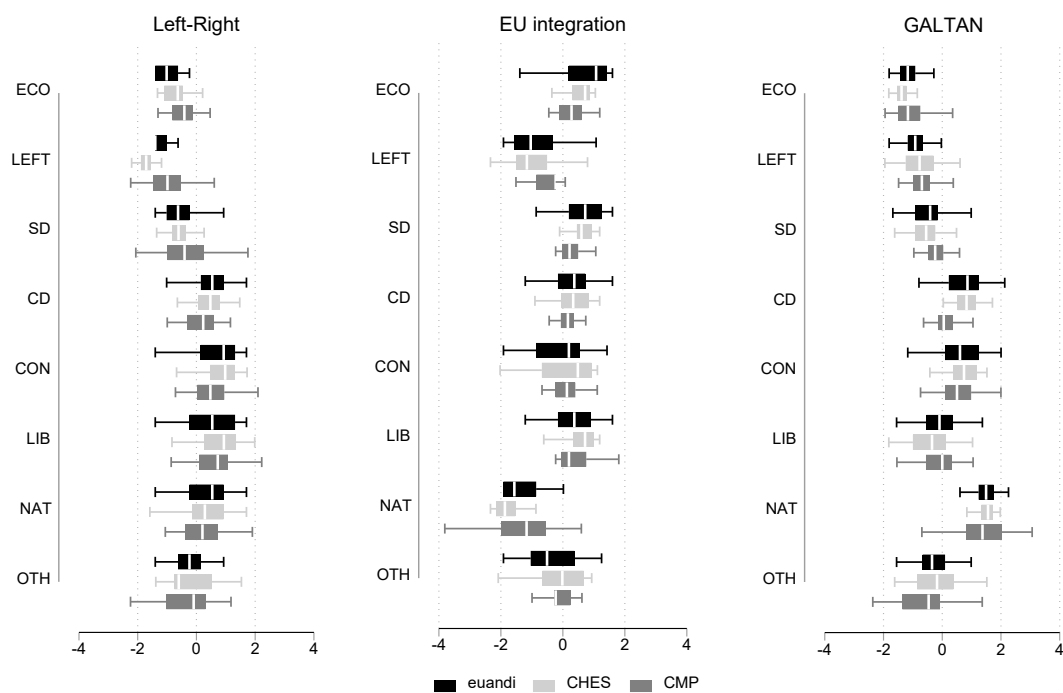
Note that for all three data sources, the dimensions were constructed using a simple additive score, attributing equal weight to all variables used to build the dimensions across all datasets.<sup>iv</sup> Details on the dimensions, original variables and their description can be found in Table A3, in the Appendix.

Another comparability issue is related to the electoral level at which the different data sources ascribe party positions. The euandi is fielded in the context of European Parliament elections, while CMP takes domestic elections, and CHES has no declared level of reference. Nevertheless, we still presume the three datasets can be compared for various reasons. First, there is literature pointing to the little differences in parties' positions between national and EP elections. For example, Braun and Schmitt (2020) show that parties do not differ substantially in their positions across electoral levels, but mainly tend to do so in terms of issue emphasis. In fact, since the constituencies are, to a large extent, the same in both types of elections, it could be argued that parties have little incentives to change their positions, although they certainly can have dynamic issue-emphasis strategies. Second, EP election campaigns are, traditionally, dominated by national issues (Kovar & Kovar, 2012; Jalali & Silva, 2011; Maier et al., 2021). Perhaps even more importantly, although the euandi VAA is fielded during EP election campaigns, the coding of parties' positions by the country experts relies also on a variety of sources stemming from the national level (e.g., the most recent national election manifesto, actions/statements of party representatives in national parliaments, older election manifestos or party documentation, interviews and media coverage including in the context of national election campaigns). Moreover, the euandi statements are designed to cover the European political space at a more general level and, accordingly, do not necessarily capture the topics that relate specifically to the EP jurisdiction. Thus, the euandi coding reflects both domestic and European elections in the data sources, rendering issues of comparability with the national level less problematic.

In Figure 1, we move to compare the positions of the main party families on the Left-Right, Pro-Anti EU integration and GALTAN dimensions across the three data sources. The box charts display the median, 25<sup>th</sup> to 75<sup>th</sup> percentile range, as well as lower and upper adjacent values. As the

original measurement scales are inconsistent across datasets, the variables have been standardised to ensure comparability, so values on the x axis reflect changes in the magnitude of a standard deviation.<sup>v</sup> We have divided the party sample into seven party families, corresponding to the classification used also in the CHES data (see Bakker et al., 2015a).<sup>vi</sup>

**Figure 1.** Mapping the European political space: Party positions by party families and dataset



*Note:* ECO: Ecological/Green; LEFT: Left Socialist; SD: Social Democratic; LIB: Liberal

CD: Christian Democratic; CON: Conservative; NAT: Nationalist; OTH: Others;

*N*=348; estimates are average positions over 2009, 2014 and 2019

The positions from the euandi dataset across all three dimensions largely overlap with those stemming from CMP and, even more strongly, with those from CHES. euandi and CHES positions are remarkably close, particularly regarding Conservative, Social Democratic and Christian

Democratic party families, where they are almost perfectly coinciding. There is a notable difference between euandi and CHES regarding the placement of left socialist parties on the socioeconomic dimension, as the latter position them much further to the left. It appears that CHES performs better in terms of distinguishing between the more moderate and radical leftism, whereas euandi places social democrats, left socialists and ecological parties rather close to each other. This could derive from the fact that the two continuous socioeconomic dimension statements present in euandi are rather general (see Table C1) and not so suitable for capturing radical left sentiments. Indeed, our replication analysis suggests that if we include all the issue-statements to the comparison (instead of just the continuous ones), this discrepancy becomes less significant (see Figure C1).

As expected, the differences between datasets are more pronounced for smaller party families. The agreement in party positions across the three data sources appears to be greater on the GALTAN dimension and smaller on the Left-Right dimension. The median positions from the CMP dataset also tend to converge more to the centre than the other two datasets, thus, depicting party systems as being more balanced than for euandi and, especially, CHES.

To get a better sense of how measurements correspond across datasets, and to investigate possible variation across time, Table 3 compares the correlations between datasets for the three timepoints, over the three dimensions.<sup>vii</sup> The correlation between the euandi dataset and the CHES is very high for all three dimensions and over the three elections under analysis. The Pearson correlation coefficients between euandi and CHES data are, on average, around .75 for every dimension. The same goes for the correlations across the three election years and within each dimension, with the slight exception of the GALTAN correlations for 2014 (.68). Although to a lesser degree, euandi and CMP also correlate fairly high, especially on the GALTAN and the EU integration dimension. Only regarding the Left-Right dimension do we find levels of correlations between euandi and CMP that fall slightly below .50. The same goes for the coefficient regarding the Pro-Anti EU integration dimension in 2009.<sup>viii</sup>



**Table 3.** Correlation matrix by dimension and election year: euandi, CHES, CMP (N=768)

	euandi – CHES				euandi – CMP				CHES – CMP			
	2009	2014	2019	All years	2009	2014	2019	All years	2009	2014	2019	All years
<b>Left-Right</b>	.74	.74	.77	<b>.75</b>	.46	.51	.44	<b>.47</b>	.51	.57	.52	<b>.53</b>
<b>GALTAN</b>	.78	.68	.78	<b>.75</b>	.53	.54	.73	<b>.58</b>	.64	.66	.72	<b>.66</b>
<b>Pro-Anti EU</b>	.75	.76	.79	<b>.76</b>	.41	.56	.67	<b>.54</b>	.60	.63	.80	<b>.65</b>
<i>N</i>	169	191	200	560	158	163	65	386	140	150	58	348

*Note:* We have kept all available observations for each pair of dataset comparisons (total N=768)

The overlap between CHES and CMP is apparent in the third block of Table 3. Both data sources are fairly well correlated. On average, however, the overlap between CHES and CMP is somewhere in between the correlations between euandi/CHES and euandi/CMP, respectively. For all dimensions and most years, the correlation coefficients between CHES and CMP are closer to the euandi/CMP correlations rather than the euandi/CHES correlations, indicating that CMP measures of party positions are generally causing the lower overlap between the two other datasets and CMP.

Both the comparison of party family positions and the correlation analysis point at CMP as somewhat of an outlier - especially on the left-right dimension - compared to other party positioning methods, in accordance with several previous studies (see Bakker et al., 2015b; Rohrschneider & Whitefield, 2012). However, certain methodological differences between these methods should be considered when interpreting this finding. While in CHES and euandi, experts estimate party positions directly on a given issue/dimension, CMP measures the relative salience of each issue within a party manifesto. Consequently, party positions on any issue or broader dimension are also affected by the salience of other categories, making it less likely to reach extreme placements. This

most likely explains why CMP tends to place far left and right parties closer to the centre, as Figure 1 indicates (see also Gemenis 2013b; Dinas & Gemenis 2010). Therefore, it is not surprising that CMP converges slightly less with VAA and expert survey data; yet, our results still attest that manifesto coding is comparable to other party placement methods.

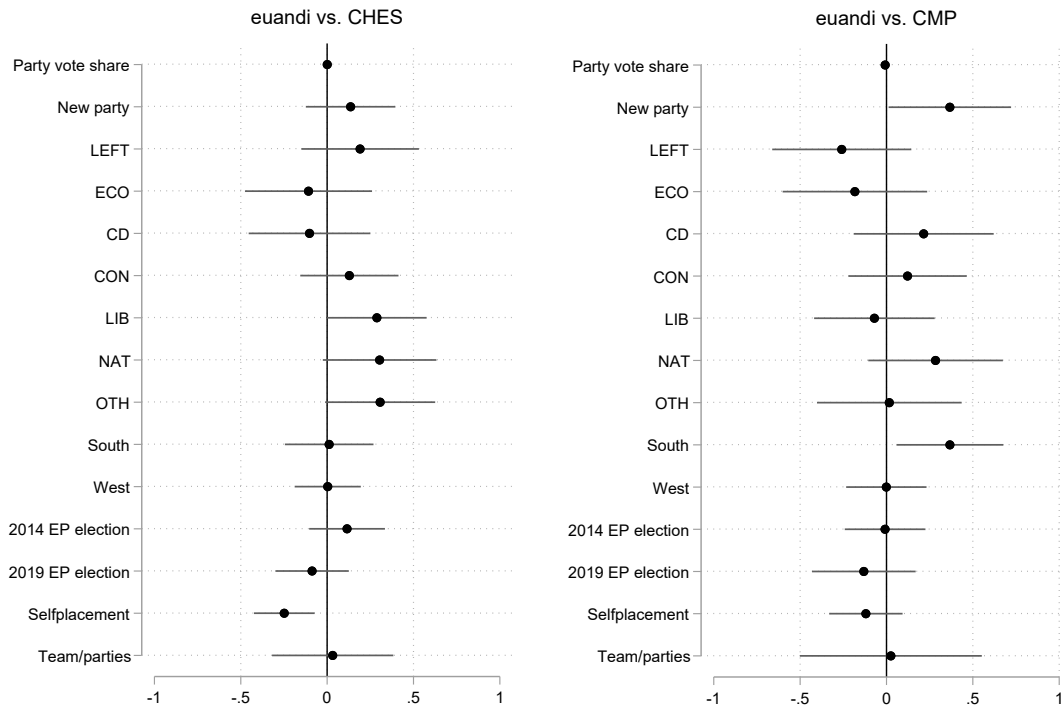
In sum, the triangulation analysis reveals a strong convergence between estimates deriving from the three data sources. The euandi dataset yields party positions largely comparable with standard methods for placing parties in the political space, and is particularly close to CHES. These results substantiate the validity and reliability of party position estimates derived from the euandi dataset, which correlate at a high level with the two most used pre-existent data sources for party positioning. Despite the limitations of the euandi dataset, such as the low number of measures for the Left-Right socioeconomic dimension, it still performs well compared to established data sources. Moreover, such limitations are counterbalanced by other assets such as offering more fine-grained measures of parties' positions on a breadth of policy items, as well as the transparency of the sources used for the codings.

### **An exploratory analysis into the sources of divergence and convergence across methods**

The results from the previous section revealed a strong overlap between the euandi data on parties' positions and both CHES and the CMP. Despite this general pattern of concurrence, differences in measurements still subsist across datasets. While these measurements were not expected to perfectly correspond across datasets, it is important to analyse what factors underly existent discrepancies to investigate potential sources of systematic bias across the different methods. An enquiry into these factors allows not only to better understand divergence across methods but may also help shedding light on their relative strengths and weaknesses.

To that end, we first computed the absolute difference, for each political party, in measurements from euandi and CHES across each of the three dimensions and then summed the total differences across the three dimensions into a single standardised measure of overall (dis)agreement.<sup>ix</sup> Again, to maximise the number of valid observations, the same procedure was repeated separately for euandi and CMP (see Appendix G for details on these variables). The resulting variables constitute our dependent variables for the subsequent analyses. Next, we ran two separate OLS regressions contrasting the differences between euandi vs. CHES and the differences between euandi vs. CMP (Figure 2 - full regression output in Table A5, in the Appendix). Our independent variables include the vote share of the party in the corresponding European Parliament election<sup>x</sup>, a dummy measuring whether the party was present in previous waves of the euandi dataset or whether it is a newly added party (0=present before; 1=newly added), dummies for all party families (reference category: Social Democratic), regional dummies (reference category: Central/Eastern Europe), year dummies (reference category: 2009 EP election wave), a variable measuring whether parties have collaborated in the euandi data collection process (0=no; 1=yes), and a ratio of the number of coders per country team by the number of parties coded, to dismiss the possibility that a greater workload per expert coder could result in reduced accuracy.

**Figure 2.** Sources of convergence/divergence between methods: OLS coefficients with 95% confidence intervals



The first regression compared the party position measurements from the euandi dataset with those contains in CHES. Of all independent variables considered, a single one is significantly related to differences in the data from these two sources: the difference in measurements is significantly reduced among parties participating in the euandi self-placement procedure. Besides substantiating the added value of the iterative method used in euandi, this important finding suggests that other VAAs not employing the same method may exhibit lower levels of convergence with expert survey data.

The second model contrasts the difference in measurements between euandi and CMP. The results slightly differ from the comparison with CHES. Here, the divergence in measurements is significantly greater for newer parties, for which it is arguably harder to retrieve documentation and infer party positions. The differences are also greater for Southern European political parties, compared to the reference category of Central/Eastern Europe. However, it should be noted that both

models reveal a poor fit, so either other forces not accounted for are at play, or the divergence between the datasets is predominantly random.

Overall, the results from this exploratory analysis show little evidence of systematic source of bias in the estimates between datasets. On the one hand, fewer observations for certain party families and, in some cases, smaller parties, can increase divergence across estimates derived from the different methods. On the other hand, the iterative method is confirmed as a valuable methodological instrument to increase the accuracy of the measurement of party positions, significantly reducing the differences between VAA data and ‘pure’ expert survey methods, such as the one employed by CHES.

### **Robustness checks**

We have conducted several robustness checks to the preceding analyses. First, we have re-estimated the entire analyses using CMP items *per605\_1* (positive mentions of Law & Order) and *per605\_2* (negative mentions of Law & Order) instead of *per605* (general favourable mentions of Law & Order). This analysis only concerns items for the GALTAN dimension, and implies a substantial reduction in sample size, since *per605\_1* and *per605\_2* are only available for a subset of the CMP sample (see footnote 3 for more details). The results do not substantially differ and can be consulted in Appendix B.

Second, instead of relying exclusively on continuous statements, we have considered all available euandi statements for each dimension at a given point in time. This option sacrifices conceptual homogeneity across the three time periods to privilege the consideration of a higher volume of information and a broader consideration of the possible policy issues comprised in each dimension. The results show even stronger patterns of association across datasets: in all dimensions, the euandi measurements correlate more strongly with both CHES and CMP than in the analyses

from Table 3. The results are available in Table C2. Table C3 models the divergence/convergence across datasets using the same policy issues.

Third, in Appendix D we have used Euromanifesto instead of CMP as a data source for text analysis. Euromanifesto has the advantage of coding at the same electoral level as euandi, regarding European Parliament elections. However, since the 2019 EP election release of the Euromanifesto is not yet available, we are only able to compare the 2009 and 2014 estimates. The results did not change significantly.

Fourth, to check if the findings were an artifact of top-level dimension rather than sub-dimensional analysis, additional analyses using sub-dimensional policy items were run for the Left-Right and GALTAN dimensions in Appendix E. The correlation coefficients are nearly identical to the original ones presented in Table 3.

Finally, Appendix F presents the results of a partial replication analysis using mass public opinion data from the European Election Studies. Since this data source only allows to estimate party positions on the Left-Right and Pro/anti-EU integration dimensions, the analysis is restricted to these two dimensions. The results show that euandi data also correlates fairly high with this additional method of placing political parties.

## **Conclusions**

Operating as mediators between political supply and demand, VAAs serve as informational devices articulating parties' policy proposals with citizens' policy preferences, synthesising and making accessible complex yet pivotal information that could otherwise be oblivious to a number of citizens. The findings from this manuscript add to the literature by highlighting a second major contribution of VAAs: an accurate, reliable method of party placement. Using euandi, the largest source of cross-national longitudinal VAA-generated data, this study concludes that it constitutes a complementary, legitimate method to estimate parties' positions in a multidimensional European political space,

performing akin to the most prominent expert survey (CHES) and manifesto data (CMP) sources. Overall, our analysis enables us to answer our three research questions by demonstrating that VAAs yield reliable party position measurements, strongly correlating with the two other methods but nonetheless tending to match more closely to traditional expert surveys than to manifesto positions, and showing little signs of systematic biases in the dissimilarities between data sources.

The unique features of VAAs extend their contributions beyond adding just another available source of party positions. First, the use of detailed policy positions offers a more fine-grained measure of parties' stances on concrete policy items that is closer to the level of policy analysis. The consensus among VAA designers on the policy statement selection criteria guarantees a focus on politically relevant, salient topics; that policy statements are diverse and encompassing of the political space; and that they effectively discriminate between parties, rendering divergent stances across parties, and reflecting the variance in the electorate (Walgrave et al., 2009). In addition, euandi devotes special attention to the key policy issues at stake in European Parliament elections, so as to better represent the European multidimensional political space. Second, by locating parties and citizens in a common policy space, and comparing parties' policy positions with the policy preferences expressed by voters, VAAs offer a 'measurable sense of the extent to which these two core components of representative government are mutually congruent' (Trechsel & Mair, 2011: 3). This approach renders VAAs adequate instruments to measure the existence of representative deficits in policy preferences (Bright et al., 2016; 2020), a repeatedly raised issue particularly at the European Union level (Mair & Thomassen, 2010; Schäfer & Debus, 2018). While research on policy congruence has typically relied on the combinations of party manifestos and expert survey data with mass surveys tapping on approximate issues (Bakker et al., 2020; McDonnell & Werner, 2018), researchers can now count on an additional method measuring congruence on the *same* policy items, using the same question wording and answer options. Third, VAAs can also be useful instruments to study political representation, enabling comparisons between the consistency of pre-election policy pledges with post-election legislative behaviour and policy implementation (Fivaz et al., 2014). This is a

particularly valuable approach in the case of VAAs that also place candidates, enabling analyses ‘not directed at the collective enactment of political programmes by fixed parliament majorities [as in manifesto analysis], but rather at the commitment of individual MPs to enact their own – sometimes party-independent – agenda’ (Schwartz et al., 2010: 540).

Though consensus on this matter is yet to be achieved, political scientists have for long searched for a *gold standard* in party positioning (Garzia et al., 2017; Marks, 2007). VAA-developers have notably contributed to this endeavour, since the implications of imprecise party positioning in tools designed specifically for the public at large would be particularly problematic, all the more if we consider potential VAA effects on electoral participation and vote choice. Proposed as a strategy to minimise inaccurate party placements, the iterative method combines multiple methodologies to maximise their strengths and counterbalance their relative limitations.

Supporting data and materials for this article can be accessed on the Taylor & Francis website, doi: [publisher to add the doi at proof].



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<sup>i</sup> For simplicity we use the generic naming euandi also when referring to the 2009 edition of the VAA, at the time called ‘EU Profiler’.

<sup>ii</sup> For example, in CHES, we used *lrecon* instead of *lrgen*, as the euandi statements only capture Left-Right *economic* positioning. Therefore, for CHES, we relied on the original variables *lrecon*, *position*, and *galtan*, respectively. Despite these efforts, some non-negligible differences subsist between the statements used to build the dimensions in the euandi dataset, and in the CHES and CMP. In fact, one of the upsides of the euandi dataset lies in its ability to longitudinally tap into party positions not only across dimensions but, especially, on concrete policy positions. This is also the reason why we preferred using individual ‘content analytical data’ items from the CMP instead of solely resorting to ‘programmatic dimensions’ variables such as *rile*, *planeco* or *markeco*, as the latter may not encompass all the policy items comprised in the euandi dimensions, or may include other, absent items.

<sup>iii</sup> *per605* was used instead of *per605\_1–per605\_2* because the latter option significantly depressed the number of observations, due to missing values on the original CMP dataset. Given that it refers to law and order issues, which approach to valence issues, not having polar positive and negative measures is arguably not as problematic as in other policy issues. In fact, the value of the difference obtained when subtracting *per605\_1–per605\_2* is quite similar to the value of *per605* (3.85 and 4.34, respectively). In any case, the analyses were replicated using *per605\_1–per605\_2* and the results do not substantively deviate (detailed analyses in Appendix B)

<sup>iv</sup> For example, in the euandi dataset, if Party X was coded 4 in the statement ‘Social programs should be maintained even at the cost of higher taxes’ and 5 in the statement ‘Government spending should be reduced in order to lower taxes’, it would score 4.5 on the Left-Right dimension.

<sup>v</sup> Note that the number of valid observations varies substantially across datasets: 768 for the euandi, 560 for CHES, and 386 for CMP. In all three-way comparisons (Figure 1) we have kept only the parties for which we have data on the three dimensions simultaneously available across all three data sources (N=348). Conversely, in pairwise comparisons (Table 3 and Figure 2) we have tried to maximize the number of cases, thus keeping all the parties for which we have data simultaneously available across the two data sources being compared. In these instances, the *N* varies, depending on the datasets being compared.

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<sup>vi</sup> Due to very low number of parties that belong to these party families, we have not included the families of regionalist, confessional and agrarian parties. These and any other parties that do not fall under any of the seven distinguished families, are compiled into the ‘Others’ category.

<sup>vii</sup> Following the recommendations from Gemenis (2012: 601; 2013a: 289), we compare the measures using not only the Pearson product-moment correlation coefficient but also the concordance correlation coefficient ( $\rho_c$ ), accompanied by the bias correction factor ( $C_b$ ). The results reveal high accuracy and do not show meaningful differences from the Pearson correlation coefficient (see Table A4 in Appendix).

<sup>viii</sup> The N for the last time-period is substantially smaller for CMP, since the data collection is still ongoing. This likely explains the clear differences compared to the previous two data points and, for this reason, the coefficients for 2019 should be interpreted with caution.

<sup>ix</sup> If there are no differences between the euandi and CHES in the estimates for a given political party in any of the three dimensions the dependent variable will score 0. If, for example, in the euandi, Podemos scores 1 standard deviation above the mean on the GALTAN dimension whereas in CHES that party scores 0.5 standard deviation above the mean on the same dimension, the absolute difference for this data entry will be 0.5 on the that dimension. If the absolute difference is also of 0.5 in the remaining two dimensions, Podemos will score a total value of 1.5 in the dependent variable. There is no theoretical upper-bound for this variable since it is measured in standard deviations, and is thus dependent on the distribution of the data. The minimum value for the dependent variable in the sample is 0.13 and the maximum 7.6. However, values above 5 are only present for the euandi vs. CMP. The mean disagreement score for the euandi vs. CHES is 1.67 ( $\sigma = 0.77$ ), and for the euandi vs. CMP is 2.23 ( $\sigma = 1.1$ ). Full details on the distribution of these variables are available in Appendix G.

<sup>x</sup> For the three parties in the sample that ran as part of a pre-electoral coalition, we used the vote share of the whole coalition.

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## **Online appendix**

## **Appendix A**

### **Supplementary information on the cross-validation procedure**

**Table A1.** Degrees of party cooperation in the 2009, 2014 and 2019 euandi dataset, by country

	2009			2014			2019		
	N Parties	N Experts	% Cooperated	N Parties	N Experts	% Cooperated	N Parties	N Experts	% Cooperated
Austria	6	7	66.7%	6	5	100.0%	6	5	100.0%
Belgium	13	8	76.9%	12	8	91.7%	14	4	57.1%
Cyprus	6	4	100.0%	8	6	62.5%	9	4	100.0%
Denmark	9	5	66.7%	8	4	50.0%	10	4	90.0%
Finland	12	2	83.3%	10	4	70.0%	12	5	83.3%
France	16	4	12.5%	10	5	30.0%	12	4	8.3%
Germany	10	6	50.0%	13	6	61.5%	15	6	100.0%
Greece	7	4	42.9%	12	5	33.3%	12	5	8.3%
Ireland	7	4	14.3%	6	5	66.7%	10	17	50.0%
Italy	8	4	12.5%	11	6	63.6%	7	6	14.3%
Luxemburg	8	4	37.5%	8	3	87.5%	10	4	100.0%
Malta	4	2	50.0%	3	4	33.3%	3	1	0.0%
Netherlands	11	3	81.8%	12	5	91.7%	12	5	83.3%
Portugal	12	4	8.3%	8	5	12.5%	12	5	25.0%
Spain	11	5	63.6%	4	5	75.0%	8	5	25.0%
Sweden	11	3	72.7%	10	6	90.0%	9	4	88.9%
UK	24	3	8.3%	13	5	23.1%	14	2	n/a
<b>Total West</b>	<b>175</b>	<b>72</b>	<b>49.9%</b>	<b>154</b>	<b>85</b>	<b>61.3%</b>	<b>175</b>	<b>86</b>	<b>60.4%</b>
Bulgaria	8	3	37.5%	8	4	25.0%	9	3	0.0%
Croatia	7	3	14.3%	7	5	57.1%	12	5	50.0%
Czech Rep.	9	4	22.2%	10	5	50.0%	8	5	87.5%
Estonia	8	5	50.0%	7	6	85.7%	8	5	50.0%
Hungary	6	2	66.7%	6	6	83.3%	7	4	14.3%
Latvia	9	3	0.0%	7	3	14.3%	10	4	90.0%
Lithuania	9	3	0.0%	7	4	57.1%	7	5	14.3%
Poland	9	4	22.2%	8	5	37.5%	6	5	16.7%
Romania	5	4	0.0%	9	4	0.0%	7	5	14.3%
Slovakia	6	3	0.0%	10	4	30.0%	10	5	30.0%
Slovenia	9	4	44.4%	9	6	66.7%	15	5	73.3%
<b>Total CEE</b>	<b>85</b>	<b>38</b>	<b>23.4%</b>	<b>88</b>	<b>52</b>	<b>46.1%</b>	<b>99</b>	<b>51</b>	<b>44.4%</b>
<b>Total EU28</b>	<b>260</b>	<b>110</b>	<b>39.5%</b>	<b>242</b>	<b>137</b>	<b>55.0%</b>	<b>274</b>	<b>137</b>	<b>54.3%</b>



**Table A2.** Matching time-series across data sources

<b>Country</b>	<b>euandi</b>	<b>CHES</b>	<b>CMP</b>
Austria	2009	2010	2008
	2014	2014	2013
	2019	2019	2017
Belgium	2009	2010	2010
	2014	2014	2014
	2019	2019	–
Bulgaria	2009	2010	2007
	2014	2014	2014
	2019	2019	2017
Croatia	2009	–	2011
	2014	2014	2015
	2019	2019	–
Cyprus	2009	–	2011
	2014	2011	2016
	2019	2019	–
Czech Rep.	2009	2010	2010
	2014	2014	2013
	2019	2019	2017
Denmark	2009	2010	2007
	2014	2014	2011
	2019	2019	–
Estonia	2009	2010	2011
	2014	2014	2015
	2019	2019	–
Finland	2009	2010	2007
	2014	2014	2011
	2019	2019	–
France	2009	2010	2007
	2014	2014	2012
	2019	2019	2017
Germany	2009	2009	2009
	2014	2014	2013
	2019	2019	2017
Greece	2009	2010	2009

	2014	2014	2015
	2019	2019	–
Hungary	2009	2010	2010
	2014	2014	2014
	2019	2019	–
Ireland	2009	2010	2011
	2014	2014	2016
	2019	2019	–
Italy	2009	2010	2008
	2014	2014	2013
	2019	2019	2018
Latvia	2009	2010	2010
	2014	2014	2014
	2019	2019	–
Lithuania	2009	2010	2008
	2014	2014	2016
	2019	2019	–
Luxembourg	2009	–	2009
	2014	2014	2013
	2019	2019	–
Malta	2009	–	–
	2014	2014	–
	2019	2019	–
Netherlands	2009	2010	2010
	2014	2014	2012
	2019	2019	2017
Poland	2009	2010	2007
	2014	2014	2011
	2019	2019	–
Portugal	2009	2010	2005
	2014	2014	2015
	2019	2019	–
Romania	2009	2010	2008
	2014	2014	2016
	2019	2019	–
Slovakia	2009	2010	2010

	2014	2014	2016
	2019	2019	–
Slovenia	2009	2010	2008
	2014	2014	2014
	2019	2019	–
Spain	2009	2010	2008
	2014	2014	2015
	2019	2019	–
Sweden	2009	2010	2010
	2014	2014	2014
	2019	2019	2018
United Kingdom	2009	2010	2010
	2014	2014	2015
	2019	2019	2017

**Table A3.** CHES and CMP variables used to create analytical dimensions

Dataset	Dimension	Variable name	Variable description
CHES	Left-Right	<i>lrecon</i>	Position of the party in YEAR in terms of its ideological stance on economic issues
	Pro-Anti EU integration	<i>position</i>	Overall orientation of the party leadership towards European integration in YEAR
	GALTAN	<i>galtan</i>	Position of the party in YEAR in terms of their views on democratic freedoms and rights
CMP	Left-Right	<i>Per505</i>	Limiting state expenditures on social services or social security. Favourable mentions of the social subsidiary principle (i.e. private care before state care)
		<i>Per504</i>	Favourable mentions of need to introduce, maintain or expand any public social service or social security scheme
		<i>Per401</i>	Favourable mentions of the free market and free market capitalism as an economic model. May include favourable references to: laissez-faire economy; superiority of individual enterprise over state and control systems; private property rights; personal enterprise and initiative; need for unhampered individual enterprises.
		<i>Per402</i>	Favourable mentions of supply side oriented economic policies (assistance to businesses rather than consumers)
		<i>Per403</i>	Support for policies designed to create a fair and open economic market. May include: calls for increased consumer protection; increasing economic competition by preventing monopolies and other actions disrupting the functioning of the market; defence of small businesses against disruptive powers of big businesses; social market economy
		<i>Per409</i>	Favourable mentions of demand side oriented economic policies (assistance to consumers rather than businesses)
	Pro-Anti EU integration	<i>Per108</i>	European Community/Union: Positive. Favourable mentions of European Community/Union in general. May include the: Desirability of the manifesto country joining (or remaining a member); Desirability of expanding the European Community/Union; Desirability of increasing the ECs/EUs competences; Desirability of expanding the competences of the European Parliament.
<i>Per110</i>		European Community/Union: Negative. Negative references to the European Community/Union. May include: Opposition to specific European policies which are preferred by European authorities; Opposition to the net-contribution of the manifesto country to the EU budget	

GALTAN	<i>Per410</i>	Economic Growth: Positive. The paradigm of economic growth. Includes: General need to encourage or facilitate greater production; Need for the government to take measures to aid economic growth.
	<i>Per416</i>	Anti-Growth Economy: Positive. Favourable mentions of anti-growth politics. Rejection of the idea that all growth is good growth. Opposition to growth that causes environmental or societal harm. Call for sustainable economic development.
	<i>Per601</i>	National Way of Life: Positive. Favourable mentions of the manifesto country's nation, history, and general appeals.
	<i>Per602</i>	National Way of Life: Negative. Unfavourable mentions of the manifesto country's nation and history.
	<i>Per603</i>	Traditional Morality: Positive. Favourable mentions of traditional and/or religious moral values.
	<i>Per604</i>	Traditional Morality: Negative. Opposition to traditional and/or religious moral values.
	<i>Per605</i>	Favourable mentions of strict law enforcement, and tougher actions against domestic crime. Only refers to the enforcement of the status quo of the manifesto country's law code. May include increasing support and resources for the police; tougher attitudes in courts; importance of internal security.
	<i>Per605_1</i>	Law and Order: Positive. Favourable mentions of strict law enforcement, and tougher actions against domestic crime. Only refers to the enforcement of the status quo of the manifesto country's law code.
	<i>Per605_2</i>	Law and Order: Negative. Favourable mentions of less law enforcement or rejection of plans for stronger law enforcement. Only refers to the enforcement of the status quo of the manifesto country's law code.
	<i>Per607</i>	Multiculturalism: Positive. Favourable mentions of cultural diversity and cultural plurality within domestic societies. May include the preservation of autonomy of religious, linguistic heritages within the country including special educational provisions.
<i>Per608</i>	Multiculturalism: Negative. The enforcement or encouragement of cultural integration. Appeals for cultural homogeneity in society.	

**Table A4.** Correlation matrix including the concordance correlation coefficient and bias correction factor: euandi, CHES, CMP

	euandi – CHES				euandi – CMP				CHES – CMP			
	N	<i>r</i>	$\rho_c$	$C_b$	N	<i>r</i>	$\rho_c$	$C_b$	N	<i>r</i>	$\rho_c$	$C_b$
<b>Left-Right</b>	560	.75	.75	1.00	386	.47	.47	.99	348	.53	.53	.99
2009	169	.74	.74	.99	158	.46	.45	.98	140	.51	.50	.98
2014	191	.74	.74	.99	163	.51	.50	.98	150	.57	.56	.99
2019	200	.77	.77	1.00	65	.44	.43	.98	58	.52	.51	.98
<b>GALTAN</b>	560	.75	.74	.99	386	.58	.58	.99	348	.66	.66	1.00
2009	169	.78	.77	.99	158	.53	.53	.99	140	.64	.64	.99
2014	191	.68	.68	.99	163	.54	.54	.99	150	.66	.66	.99
2019	200	.78	.77	.99	65	.73	.76	.97	58	.72	.72	.98
<b>Pro-Anti EU integration</b>	560	.76	.76	.99	386	.54	.53	.99	348	.65	.65	1.00
2009	169	.75	.74	.99	158	.41	.40	.96	140	.60	.59	.98
2014	191	.76	.75	.99	163	.56	.55	.98	150	.63	.62	.99
2019	200	.79	.79	.99	65	.67	.66	.99	58	.80	.80	.99

Note: concordance correlation coefficient ( $\rho_c$ ) ; bias correction factor ( $C_b$ ) ; N=768

**Table A5.** Sources of convergence/divergence between methods: OLS regression

	euandi vs. CHES	euandi vs. CMP
Party vote share	0.001 (0.005)	-0.008 (0.006)
New party	0.136 (0.132)	0.367* (0.180)
SD	(base)	(base)
LEFT	0.191 (0.173)	-0.259 (0.205)
ECO	-0.108 (0.187)	-0.183 (0.212)
CD	-0.102 (0.179)	0.215 (0.206)
CON	0.129 (0.145)	0.122 (0.174)
LIB	0.288 (0.147)	-0.070 (0.178)
NAT	0.304 (0.167)	0.284 (0.198)
OTH	0.307 (0.162)	0.016 (0.213)
East	(base)	(base)
South	0.012 (0.131)	0.367** (0.157)
West	0.003 (0.097)	-0.001 (0.118)
EP election year		
2009	(base)	(base)

2014	0.115	-0.008
	(0.112)	(0.119)
2019	-0.087	-0.131
	(0.108)	(0.153)
Selfplacement	-0.248**	-0.119
	(0.089)	(0.108)
Team/parties	0.032	0.025
	(0.179)	(0.268)
Constant	-0.184	0.059
	(0.202)	(0.215)
<hr/>		
N	560	386
r <sup>2</sup>	0.05	0.07

Standard errors between parenthesis

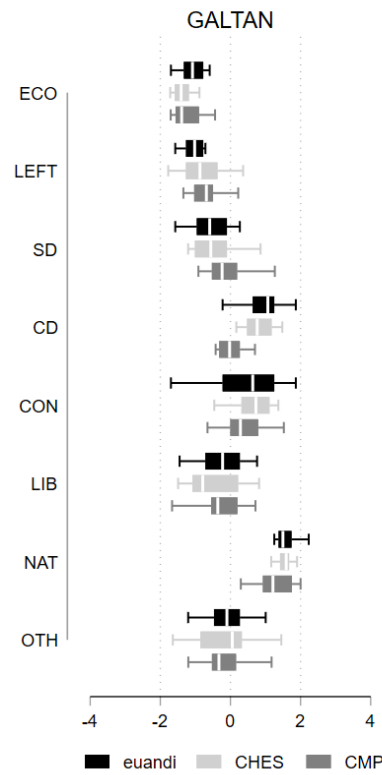
\* p<0.05, \*\* p<0.01, \*\*\* p<0.001



## **Appendix B**

**Replication analysis using *per605\_1-per605\_2* instead of *per605***

**Figure B1.** Replication of Figure 1 using *per605\_1-per605\_2*



**Table B1.** Replication of Table 3 using *per605\_1-per605\_2*

euandi – CMP				CHES – CMP			
N	<i>r</i>	$\rho_c$	$C_b$	N	<i>r</i>	$\rho_c$	$C_b$

**GALTAN**

2009	14	.17	.12	.73	7	.50	.42	.93
2014	88	.43	.42	.99	81	.62	.61	.99
2019	65	.76	.73	.95	58	.72	.72	.99

**Table B2.** Replication the analysis from Figure 2 using *per605\_1-per605\_2*

	euandi vs. CHES	euandi vs. CMP
Party vote share	0.001	-0.014
	(0.005)	(0.009)
New party	0.136	0.373
	(0.132)	(0.215)
ECO	(base)	(base)
LEFT	0.299	-0.048
	(0.204)	(0.358)
SD	0.108	0.110
	(0.187)	(0.320)
CD	0.006	0.752
	(0.211)	(0.404)
CON	0.237	0.427
	(0.194)	(0.337)
LIB	0.396*	0.054
	(0.184)	(0.333)
NAT	0.412*	0.079
	(0.202)	(0.340)
OTH	0.415*	-0.111
	(0.194)	(0.351)
East	(base)	(base)
South	0.012	0.183
	(0.131)	(0.227)
West	0.003	-0.118
	(0.097)	(0.207)
EP election year		
2009	(base)	(base)

2014	0.115	-0.226
	(0.112)	(0.314)
2019	-0.087	-0.402
	(0.108)	(0.333)
Selfplacement	-0.248**	-0.271
	(0.089)	(0.185)
Team/parties	0.032	-0.094
	(0.179)	(0.455)
Constant	-0.184	0.474
	(0.202)	(0.461)
<hr/>		
N	560	167
r <sup>2</sup>	0.05	0.14

Standard errors in parenthesis

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

## **Appendix C**

**Replication analysis using all available euandi policy items**

**Table C1.** List of euandi policy items by EP election year and across dimensions

1	2009	2014	2019	LR	EU	GALTAN
Social programs should be maintained even at the cost of higher taxes.	X	X	X	X		
Government spending should be reduced in order to lower taxes	X	X	X	X		
Immigration into [your country] should be made more restrictive	X	X	X			X
Immigrants from outside Europe should be required to accept our culture and values	X	X	X			X
The legalisation of same sex marriage is a good thing	X	X	X			X
The decriminalisation of the personal use of soft drugs is to be welcomed	X	X	X			X
Euthanasia should be legalised	X	X	X			X
The EU should acquire its own tax raising powers	X	X	X		X	
Renewable sources of energy (e.g., solar or wind energy) should be supported even if this means higher energy costs	X	X	X			X
The promotion of public transport should be fostered through green taxes (e.g., road taxing)	X	X	X			X
Criminals should be punished more severely	X	X	X			X
On foreign policy issues, such as relationships with Russia, the EU should speak with one voice	X	X	X		X	
The European Union should strengthen its security and defence policy	X	X	X		X	
European integration is a good thing	X	X	X		X	
Individual member states of the EU should have less veto power	X	X	X		X	
Governments should reduce workers' protection regulations in order to fight unemployment	X	X		X		
Any new European Treaty should be subject to approval in referendum in [your country]	X	X			X	
Greater efforts should be made to privatise healthcare in <country>	X			X		
State subsidies for creches and childcare should be increased substantially	X			X		
Immigration policies oriented towards skilled workers should be encouraged as a means of fostering economic growth	X					X
Religious values and principles should be shown greater respect in politics	X					X
Governments should bail out failing banks with public money	X			<sup>2</sup>		
The EU should drastically reduce its subsidies to Europe's farmers	X			X		
Policies to fight global warming should be encouraged even if it hampers economic growth or employment	X					X
Restrictions of civil liberties should be accepted in the fight against terrorism	X					X
[Your country] is much better off in the EU than outside it	X				X	
The European Union should be enlarged to include Turkey	X				<sup>3</sup>	
The European Parliament should be given more powers	X				X	
It should be harder for EU immigrants working or staying in [your country] to get access to social assistance benefits than it is for [your country's] citizens		X				X

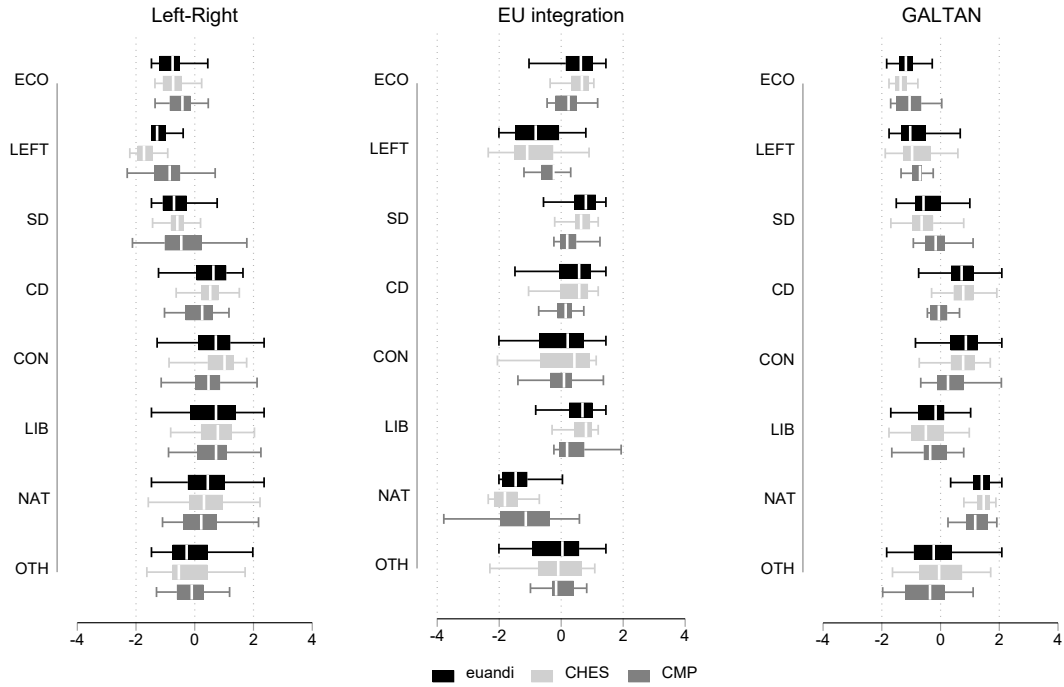
<sup>1</sup> Does not include 2 country-specific statements included in the EU Profiler 2009 and the euandi2014

<sup>2</sup> Excluded because it did not load into any dimension and has no clearly discernible ideological direction (Trechsel and Mair, 2011)

<sup>3</sup> Excluded because it did not load into any dimension and has no clearly discernible ideological direction (Trechsel and Mair, 2011)

Pension benefits should be reduced to limit the state debt in [your country]		X		X		
To fight the problem of illegal immigration, the European Union should take responsibility for patrolling its borders		X			X	
Embryonic stem cell research should be stopped		X				X
Access to abortion should become more restricted		X				X
To tackle the sovereign debt crisis, the member states of the Eurozone should be allowed to issue common bonds (Eurobonds)		X		X		
The EU should relax its austerity policy in order to foster economic growth		X		X		
Bank and stock market gains should be taxed more heavily		X	X	X		
The state should provide stronger financial support to unemployed workers		X	X	X		
Restrictions of personal privacy on the Internet should be accepted for public security reasons		X	X			X
The single European currency (Euro) is a bad thing		X	X		X	
Asylum seekers should be distributed proportionally among EU Member States through a mandatory relocation system			X		X	
The EU should rigorously punish Member States that violate the EU deficit rules			X	X		
In the European Parliament elections, EU citizens should be allowed to cast a vote for a party or candidate from any other Member State			X		X	
<i>Total</i>	28	28	22	12	12	16

**Figure C1.** Replication of Figure 1 using all available euandi policy items



**Table C2.** Replication of Table 3 using all available euandi policy items

	euandi – CHES				euandi – CMP			
	N	<i>r</i>	$\rho_c$	$C_b$	N	<i>r</i>	$\rho_c$	$C_b$
<b>Left-Right</b>								
2009	168	.70	.70	.99	158	.53	.52	.98
2014	191	.75	.75	1.00	163	.58	.57	.98
2019	200	.81	.81	1.00	65	.47	.46	.97
<b>GALTAN</b>								
2009	168	.84	.84	1.00	158	.65	.65	.99
2014	189	.86	.86	.99	162	.68	.68	.99
2019	200	.86	.86	.99	65	.76	.75	.99
<b>Pro-Anti EU integration</b>								
2009	168	.84	.83	.99	157	.50	.49	.98
2014	191	.84	.84	.99	163	.60	.60	.98
2019	199	.85	.85	.99	65	.72	.71	.99



**Table C3.** Replication of the analysis of section 4 using all available euandi policy items

	euandi vs. CHES	euandi vs. CMP
Party vote share	-0.003	-0.004
	(0.005)	(0.009)
New party	0.048	0.397
	(0.1323	(0.211)
ECO	(base)	(base)
LEFT	0.872***	-0.052
	(0.203)	(0.348)
SD	0.298	-0.154
	(0.186)	(0.311)
CD	0.464*	0.650
	(0.210)	(0.393)
CON	0.697***	-0.065
	(0.193)	(0.330)
LIB	0.557**	-0.318
	(0.183)	(0.324)
NAT	0.690**	0.003
	(0.200)	(0.331)
OTH	0.691***	0.010
	(0.194)	(0.342)
East	(base)	(base)
South	0.008	-0.101
	(0.130)	(0.222)
West	0.085	-0.527*
	(0.097)	(0.202)
EP election year		
2009	(base)	(base)

2014	-0.100	-0.575
	(0.111)	(0.305)
2019	-0.077	-0.415
	(0.108)	(0.324)
Selfplacement	-0.158	-0.214
	(0.089)	(0.180)
Team/parties	0.060	-0.494
	(0.182)	(0.443)
Constant	-0.449*	1.155*
	(0.201)	(0.449)
<hr/>		
N	555	386
r <sup>2</sup>	0.07	0.19

Standard errors between parenthesis

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

## **Appendix D**

**Partial replication analysis using Euromanifesto 2009 and 2014**

Since the euandi data collection is collected in the context of EP election campaigns, we have also replicated the analysis using a manifesto data source focused on EP elections: the euromanifesto. However, the current releases of the euromanifesto are limited to the 2009 and 2014 elections, so our analysis is restricted to those two data points.

The construction of the analytical dimensions with the euromanifesto data tried to mimic, as much as possible, the procedure adopted for the CMP data. Namely, we have attempted to include the same policy items to measure the corresponding dimensions. For example, we have relied on the *planeco*, *markeco*, and *welfare* sub-dimensions instead of the general *rile* which captures a more encompassing conceptualization of left-right. The dimensions were constructed as follows for 2009 and 2014, respectively<sup>45</sup>:

$$EMLR09 = \frac{(planeco) + (markeco) + (welfare)}{3}$$

$$EMEU09 = pro\_anti\_EU$$

$$EMGALTAN09 = \frac{(per\_v\_601 - per\_v\_602) + (per\_v\_603 - per\_v\_604) + (per\_v\_605a - per\_v\_605b) + (per\_v\_608 - per\_v\_607) + (per\_v\_416b - per\_v\_416a)}{20}$$

$$EMLR14 = \frac{(planeco) + (markeco) + (welfare)}{3}$$

$$EMEU14 = pro\_anti\_EU$$

$$EMGALTAN14 = \frac{(per\_v\_601a - per\_v\_601b) + (per\_v\_603a - per\_v\_603b) + (per\_v\_605a - per\_v\_605b) + (per\_v\_607b - per\_v\_607a) + (per\_v\_416b - per\_v\_416a)}{15}$$

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<sup>4</sup> *Planeco* and *welfare* were rotated to ensure coherence in the direction of the correlations with *markeco* (i.e., higher values on all items indicate right-wing positions).

<sup>5</sup> In the galton dimension, we have included all levels available for each Euromanifesto release. Thus, although not specified in the equations, we have used *per\_v1\_\**, *per\_v2\_\**, *per\_v3\_\**, and *per\_v4\_\** in 2009, and *per\_v1\_\**, *per\_v2\_\**, and *per\_v3\_\** in 2014. For this reason, the denominator is four-times as large as the pairs of items on the numerator in 2009, and three-times in 2014.

Again, the variables were standardized to facilitate comparability with the other data sources. To analyze the correspondence of Euromanifesto party positions with the euandi, CHES and CMP, we have replicated Table 3, and present a simplified version below.

**Table D1.** Partial replication analysis of Table 3 using Euromanifesto data from 2009 and 2014

	euandi – euromanifesto		CHES – euromanifesto		CMP – euromanifesto	
	2009	2014	2009	2014	2009	2014
<b>Left-Right</b>	.27	.37	.36	.38	.73	.79
<b>GALTAN</b>	.52	.52	.54	.62	.62	.60
<b>Pro-Anti EU</b>	.65	.68	.78	.77	.54	.53
<i>N</i>	162	144	139	144	130	123

The results are generally in line with the correlations originally presented in Table 3. The correlation between both the euandi and CHES datasets with the euromanifesto are substantially lower on the left-right dimension. Again, the comparability issues of the left-right positions stemming from CMP manifesto data with estimates from different methods could apply to other sources using the same methodology (Gemenis, 2013b; Laver, 2003; Laver and Garry, 2000). The correlations are significantly higher on the GALTAN and, especially, on the pro-anti EU dimension. Noticeably, on the latter dimension the euandi and CHES even correlate at a higher level than the other data source using manifesto data (CMP). As expected, on the two remaining dimensions, CMP correlates the highest with euromanifesto estimates. The fact that the Euromanifesto uses EP election manifestos, more likely to prime EU-related issues over left-right and galtan – which are arguably more discussed in domestic election campaigns –, could help explain the greater convergence on this dimension with the two other data sources (as well as the weaker convergence with CMP, which declaredly focuses on national election manifestos).

## **Appendix E**

### **Partial replication analysis using CHES sub-dimensional policy positions**

Beyond the overarching policy dimensions used in the main text, the CHES contains a number of sub-dimensional policy measures (named policy dimensions in the codebook). These items are arguably better equipped to capture parties positions on specific policies, and could therefore be used in the triangulation instead of the more general dimensions. However, note that no policy items fit on the pro-anti EU integration dimension, so the analysis only comprises the Left-Right and GALTAN dimensions.

The dimensions for comparison were constructed as follows:

$$CHESLR = \frac{spendvtax + deregulation + econ\_interven + redistribution + protectionism}{5}$$

$$CHESGALTAN = \frac{immigrate\_policy + multiculturalism + environment + civlib\_laworder + sociallifestyle + religious\_principles + ethnic\_minorities + nationalism}{8}$$

Table E1 presents the correlations between euandi and CHES using these sub-dimensional policy measures rather than relying on pre-constructed dimensions. The differences between these and the original measures used in the main text is negligible, as expected given the high correlation between CHESLR and *lrecon* ( $r=.93$ ) and CHESGALTAN and *galtan* ( $r=.92$ ).

**Table E1.** Correlation between euandi and CHES sub-dimensional policy measures

	euandi – CHES			
	2009	2014	2019	All years
<b>Left-Right</b>	.76	.75	.75	<b>.75</b>
<b>GALTAN</b>	.82	.71	.81	<b>.77</b>
<i>N</i>	169	191	200	146

## **Appendix F**

**Partial replication analysis using mass public opinion data from the  
EES**



Public opinion surveys offer a different method to derive parties' positions – one that is based on the public's perceptions of political parties and where they stand on the different dimensions. While it is not our intention to thoroughly discuss the virtues and limitations of this method, we should nonetheless note that this approach is not without problems: for example, individual perceptions of party positions may be biased by numerous reasons (partisanship, media reporting, etc.), or individuals may have insufficient knowledge or information about smaller parties. Nevertheless, in the spirit of triangulation through a maximization of data types and sources, we also considered it as a potential party placement method. For those purposes, we have relied on the Voter Study from the European Election Studies (EES) data from 2009, 2014, and 2019. The selection of this mass public opinion resource was guided by two criteria. First, like the euandi data, it is fielded in the context of European Parliament elections. Second, it includes voters' perceptions of parties' positions on two dimensions of political competition, thus going beyond most comparative survey datasets which only capture the left-right dimension. However, it should be highlighted that this implies that we can only triangulate on the left-right and pro/anti EU integration dimensions, as party positions on the GALTAN dimension were not asked.

Since this constitutes an additional method (and not merely a robustness check of a previously considered method), Table F1 presents the correlations between EES, euandi, CHES, and CMP data.

**Table F1.** Correlations between EES, euandi, CHES, and CMP on the left-right and EU dimensions

	EES – euandi				EES – CHES				EES – CMP			
	2009	2014	2019	All years	2009	2014	2019	All years	2009	2014	2019	All years
<b>Left-Right</b>	.60	.69	.66	<b>.65</b>	.73	.74	.77	<b>.74</b>	.29	.46	.39	<b>.39</b>
	(154)	(157)	(160)	<b>(471)</b>	(154)	(157)	(160)	<b>(471)</b>	(149)	(134)	(56)	<b>(339)</b>
<b>Pro-Anti EU</b>	.59	.45	.67	<b>.58</b>	.74	.57	.79	<b>.70</b>	.49	.48	.72	<b>.53</b>
	(183)	(151)	(173)	<b>(507)</b>	(154)	(143)	(159)	<b>(456)</b>	(149)	(121)	(56)	<b>(326)</b>

Note: *N* between parentheses

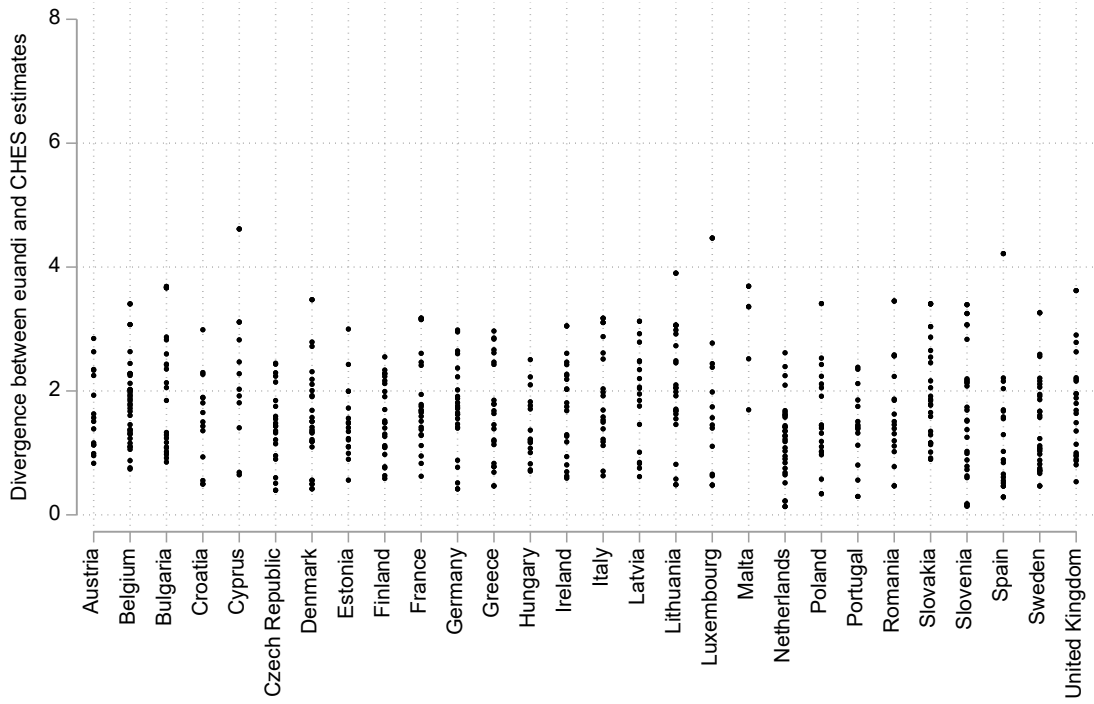
The results show that the EES public opinion data correlates the highest with the CHES, followed by the euandi, and the CMP data. The correlations tend to be higher on the Left-Right dimension, apart from the CMP case which, again, can likely be explained by the limitations of the manifesto data on this dimension, as previously discussed. Noticeably, on the Pro-Anti EU integration dimension there are significant drops in the correlation coefficients in 2014. Due to an EES data collection issue, these items were not asked on the original survey but only later in a subsequent second post-electoral survey fielded in March 2015. The nearly .15 points drop in 2014 on the correlations with both VAA and expert survey data appear to suggest that data quality on the pro-anti EU integration dimension may have been affected by this incident.

Overall, this additional triangulation effort confirms that VAA data also correlates relatively high with yet another method of estimating parties positions, reinforcing the conclusions with regard to its validity as a party placement method.

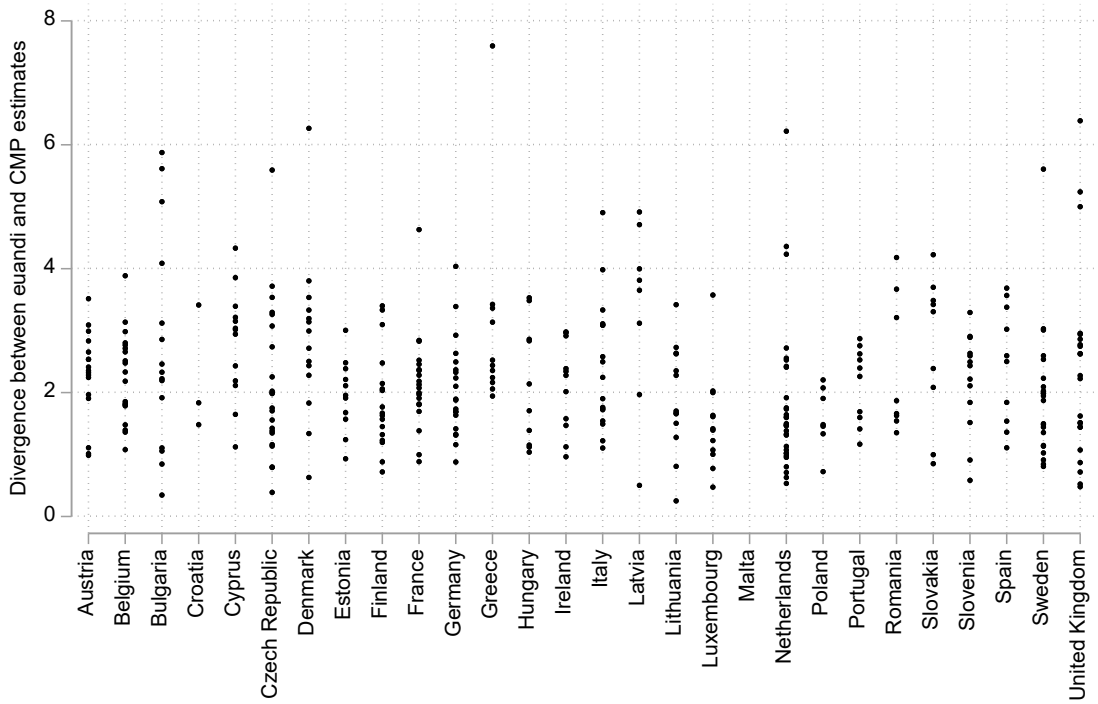
## **Appendix G**

**Details on the disagreement dependent variables used in section 5**

**Figure G1.** Divergence between euandi and CHES estimates, by country



**Figure G2.** Divergence between euandi and CMP estimates, by country



**Table G1. Bottom 5% and top 5% diverging parties: euandi and CHES**

<b>Div. euandi vs. CHES</b>	<b>Party name</b>	<b>Country</b>	<b>Year</b>
0.134778	Party for the Animals	Netherlands	2009
0.142013	For Real	Slovenia	2009
0.176198	New Slovenia -- Christian People's Party	Slovenia	2014
0.223965	Christian Union	Netherlands	2019
0.288672	United Left	Spain	2014
0.29764	CDS-People's Party	Portugal	2009
0.341624	Democratic Left Alliance	Poland	2009
0.397306	Christian Democratic Union -- People's Party	Czech Republic	2014
0.419524	Alternative for Germany	Germany	2019
0.420314	Conservatives	Denmark	2014
0.464571	Citizens	Spain	2019
0.466999	Christian Democrats	Sweden	2014
0.467631	Coalition of the Radical Left	Greece	2014
0.468706	Greater Romania Party	Romania	2009
0.481134	Democratic Party	Luxembourg	2019
0.487289	Liberals Movement of the Republic of Lithuania	Lithuania	2019
0.497506	Social Democrats	Denmark	2009
0.498309	Human Shield	Croatia	2019
0.510385	Civic Democratic Party	Czech Republic	2019
0.513609	Spanish Socialist Workers Party	Spain	2019
0.516375	The Left	Germany	2019
0.51726	Labour Party	Netherlands	2019
0.53509	Plaid Cymru	United Kingdom	2019
0.550917	Basque Nationalist Party	Spain	2009
0.554641	Sustainable Development of Croatia	Croatia	2014
0.55585	Social Democrats	Denmark	2014
0.560442	Social Democratic Party	Estonia	2014
0.560571	Socialist Peoples Party	Denmark	2014
3.063467	Lithuanian Peasant Union	Lithuania	2009
3.067473	Slovenian National Party	Slovenia	2009
3.072621	Workers' Party of Belgium	Belgium	2009
3.104446	Forza Italia	Italy	2014
3.113013	Progressive Party of Working People	Cyprus	2019
3.124949	Harmony Centre	Latvia	2009
3.153988	National Rally	France	2019
3.175186	Brothers of Italy-National Alliance	Italy	2014
3.1763	Union for a Popular Movement	France	2014

3.250365	Democratic Party of Pensioners of Slovenia	Slovenia	2019
3.262205	Pirate Party	Sweden	2009
3.36018	Nationalist Party	Malta	2014
3.392862	Alliance of Alenka Bratusek	Slovenia	2019
3.405032	New Slovakia	Slovakia	2014
3.405537	Reformist Movement	Belgium	2014
3.409245	Hungarian Coalition	Slovakia	2014
3.411063	Law and Justice	Poland	2009
3.452082	National Liberal Party	Romania	2014
3.473468	Liberal Party	Denmark	2019
3.621029	British National Party	United Kingdom	2009
3.666368	Movement for Rights and Freedoms	Bulgaria	2009
3.668482	Bulgaria Without Censorship	Bulgaria	2014
3.687912	Attack	Bulgaria	2009
3.690843	Malta Labour Party	Malta	2014
3.902107	Homeland Union	Lithuania	2019
4.217577	Canary Coalition	Spain	2009
4.469059	The Left	Luxembourg	2014
4.615137	European Party	Cyprus	2014

**Table G2.** Bottom 5% and top 5% diverging parties: euandi and CMP

<b>Div. euandi vs. CMP</b>	<b>Party name</b>	<b>Country</b>	<b>Year</b>
0.251519	Lithuanian Social Democratic Party	Lithuania	2014
0.34583	Citizens for European Development of Bulgaria	Bulgaria	2019
0.388719	Communist Party of Bohemia and Moravia	Czech Republic	2009
0.47367	Alternative Democratic Reform Party	Luxembourg	2009
0.479886	Green Party	United Kingdom	2014
0.501817	Union of Greens and Farmers	Latvia	2014
0.522603	Social Democratic and Labour Party	United Kingdom	2014
0.533396	Labour Party	Netherlands	2014
0.583367	Slovenian People's Party	Slovenia	2009
0.62957	Democrats 66	Netherlands	2014
0.629738	Socialist Peoples Party	Denmark	2014
0.709465	People's Party for Freedom and Democracy	Netherlands	2019
0.717695	Plaid Cymru	United Kingdom	2019
0.719121	Christian Democrats	Finland	2014
0.723869	Law and Justice	Poland	2009
0.775492	The Greens	Luxembourg	2014
0.79116	Dawn – National Coalition	Czech Republic	2014
0.798234	Action of Dissatisfied Citizens	Czech Republic	2014
0.802621	People's Party for Freedom and Democracy	Netherlands	2014
4.181243	National Liberal Party	Romania	2014
4.226139	Christian Democratic Movement	Slovakia	2009
4.234524	50PLUS	Netherlands	2019
4.332255	Movement for Social Democracy EDEK	Cyprus	2014
4.359632	Party for Freedom	Netherlands	2019
4.631783	Union of Democrats and Independents	France	2019
4.711628	Harmony	Latvia	2014
4.905708	Five Star Movement	Italy	2014
4.916337	Latvia's First Party/Latvian Way	Latvia	2009
5.001485	Sinn Fein	United Kingdom	2019
5.082282	Attack	Bulgaria	2014
5.240398	Sinn Fein	United Kingdom	2014
5.592578	Freedom and Direct Democracy Tomio Okamura	Czech Republic	2019
5.607806	Christian Democrats	Sweden	2019
5.615515	Bulgaria Without Censorship	Bulgaria	2014
5.875796	National Front for the Salvation of Bulgaria	Bulgaria	2014
6.220132	Party for Freedom	Netherlands	2014

6.266396	Danish Social Liberal Party	Denmark	2014
6.388523	United Kingdom Independence Party	United Kingdom	2014
7.596727	Independent Greeks	Greece	2014