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European Social Survey academic impact monitoring

Annual report 2021

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Aims, methods and content of the report

In order to evaluate ESS academic impact, inform its questionnaire design and re-design and guide its outreach and communications actions ESS collects continuous and detailed feedback on its academic use. Bibliographic monitoring provides the following **information**, **outputs and guidance**:

- Longitudinal empirical evidence on the scope, geographical and disciplinary patterns of ESS academic usage, theory development and policy references;
- Empirical support for informed decision-making of the ESS bodies (CST, SAB and QDTs) concerning the questionnaire content (item and modules selection and revision), targeting training and communication strategies and similar;
- Summary bibliographic reports, a full list of citations (Appendix 1) with a possibility to produce tailor-made sub-lists according to various criteria and item usage statistics (Appendix 2). These documents help demonstrate ESS academic relevance to European and national funders and users (NCs, GA);
- Bibliographic repository for other work packages to be used for methodological testing, updating of ESS online bibliography, as well as to support ESS communication actions and produce relevant outreach materials.
- Feeds its data into the ESS online bibliographic tool which renders bibliographic variables available to the general audience and enables users to browse ESS publications according to a variety of criteria.

The 2021 annual bibliographic report (Deliverable 11.10) includes publications for the **period 2003-2020.** Across the report, an **ESS-based publication** is defined as any type of academic publication in English language, i.e. *journal article, book, book chapter, published conference, research paper, report* or *thesis*. It can either be methodological, or substantive, with at least one ESS item used in **primary analysis**. Accordingly, the relevant universe does not include ESS based publications in other languages or substantive publications using European Social Survey keyword without primary data usage (e.g. publications that report replicating ESS items, secondary citations of ESS data and similar). Due to extensive coding of variables derived from the texts, English language is a necessary limitation. To the extent these publications coincide with global academic visibility, the database seeks to achieve the highest possible coverage of ESS-based **international publications**.

As in previous years, ESS based publications were identified by the **Google Scholar** indexing tool, which is believed to be the most comprehensive when it comes to covering various types of publications (see Nederhof, 2006; Mayr and Walter 2007; Ware and Mabe, 2012). The key phrase 'European Social Survey' + 'round(s)' or 'wave(s)' was searched for in the texts or abstracts to identify relevant publications. Those containing the keywords were reviewed case-by-case to confirm primary ESS data use. About 60% of the original Google Scholar hits are discarded through this process due to irrelevance or duplication. The

exercise resulted in 516 newly acquired publications for the publishing year 2020. With the inclusion of the latest annual batch, the combined number of ESS based publications and presentations has reached **5429**. Considering that the ESS has been celebrating 20th anniversary of its first fieldwork, this year's report puts more emphasis on cross-time trends than usual in most of its chapters.

The 2020 ESS annual bibliographic report includes the following sections:

- 1 ESS use across academic communities
- 2 Research topics in cross-domain and cross-time perspective
- 3 Findings production across ESS countries
- 5 The use of country data
- 6 The extent and dynamic of questionnaire sections use
- 7 Social context and item relevance
- 8 The cycle of rounds use
- 9 Analytical feedback
- 10 Informing policy
- 11 Key takeaways

1 ESS USE ACROSS ACADEMIC COMMUNITIES

1.1 ESS publishing scope and trend

European Social Survey is a **multi-purpose comparative survey**, designed to be repeated at regular intervals to support monitoring and modelling of societal change and facilitate the studying of sub-groups by pooling cases. It was designed with a primary aim to provide high-quality longitudinal comparative data to a number of academic communities and support empirical analysis of societal phenomena in a variety of scientific fields. Data from ESS and similar programmes relieve researchers from the task of collecting their own data and therefore considerably reduce the costs of research (Vezzoni, 2015).

The success of this mission is well reflected in the number and scope of academic publications generated by such programmes, which makes this aspect one of the key performance indicators for the European research infrastructures and also in the ESS bibliographic reports. Figure 1 presents the standard summary chart of ESS international publishing. With the 2020 publishing year added, the overall number of ESS based publications identified via Google Scholar has reached 5429, with 2630 of them being articles in peer-reviewed journals. The dominant share of journal articles is mostly due to their actual prevalence as the most widespread and prestigious type of academic output, and partially due to their much better coverage and accessibility in publication searches, a consequence of university subscription schemes.

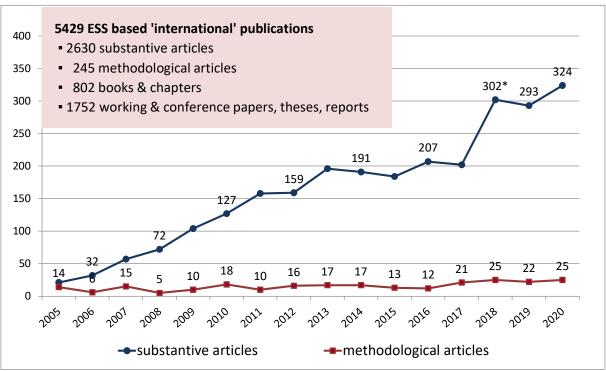


Figure 1: ESS English language academic publishing in the 2003-2020 period (Google Scholar) (* new search algorithm applied from publication year 2018)

As noted in previous reports, documenting books, chapters, working and conference papers and theses might become more relevant when ESS will be subject to ESFRI evaluations where attention to other types of publications was explicitly highlighted (ESFRI 2018). Considering access issues with books and chapters in particular, it can safely be assumed

that the actual number of ESS—based English language publications is (considerably) larger, particularly in the category of books, chapters and theses, while the coverage of international journal articles is reasonably complete. There is also the entire additional universe of national language publications, which will hopefully be captured and documented to a significant extent by the self-completion feature of the new ESS online bibliography.

1.2 Disciplinary profile of academic users

ESS is a pan-European survey infrastructure designed to provide data for a number of academic fields and be a free vehicle for special topics for international research teams. According to the Blueprint, ESS aimed at a clientele in a broad scope of social science disciplines: political science, sociology, social psychology, mass communication, economic sciences, modern social history and social anthropology (ESF 1998).

In view of this goal, this section identifies ESS main user groups across domains, using **journal disciplinary field** as a proxy measure (Figure 2). There are six scholarly fields where ESS based analyses appear most frequently, most notably *sociology* (34.1%), *political science* (23.3%) and *economy* (13.8%), followed by *health & medicine* (6.7%), *psychology* (5.5%) and *methods* (5.8%).

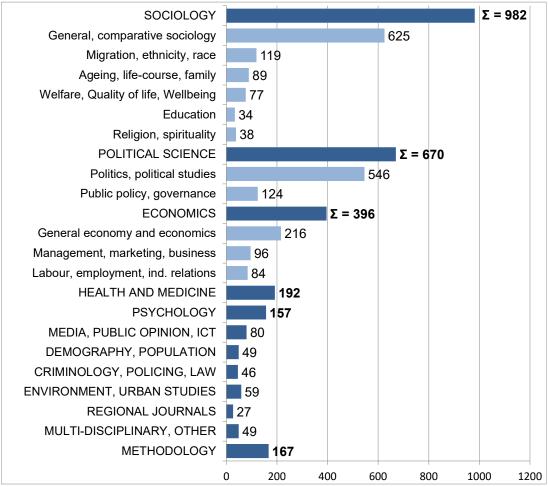


Figure 2: ESS outreach into academic fields in the 2003-2020 period, based on journal typology (N=2874)

According to this picture, academic audiences that ESS creators were primarily targeting when designing the questionnaire have been reached, with a few exceptions (e.g. anthropology). In addition, a number of narrower academic communities are continuously being added to the picture through rotating modules (e.g. criminology, medicine, environment). The general structure of user groups is to some extent contextually determined, reflecting the size of European and global academic communities across domains, but also reflects ESS questionnaire content and its relevance for various fields of research.

As noted, observing trends is one of the main themes of this annual report. Figure 3 examines the **dynamic of ESS use across domains** over a decade and a half long publication period. The reason we exclude the initial publication period is that in the first few years after the round 1 cumulative data file was issued (2003), ESS based publications, particularly journal articles which are the basis for this analysis, did not appear strongly enough to be reliably analysed.

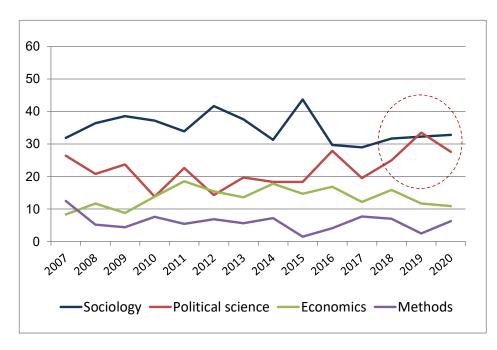


Figure 3: The trend of ESS publishing across domains (based on journal typology) in the 2003-2020 period, (% shares, N=2874)

The general shares of the three main substantive domains seem to be relatively constant across time, with fluctuations likely caused by rotating module cycles, sometimes also special journal issues or edited collections. Nonetheless, a trend of growth in the share of articles in **political sciences journals** in the last 5 years can be observed, as well as a somewhat lower share of articles in sociological journals. This is partially the effect of the 2012 Democracy module, but - as later sections will show – primarily the result of contextual effects, most notably the global surge of populist parties and politicians, which seem to draw more analysts to the topic of politics and political system. Considering that the disciplinary boundary between sociology and political science is perhaps less strict than in case of other domains, with both addressing similar societal issues, publishing analysts may 'migrate' with more ease into the other domain when a topic becomes salient. The 2019 year became the (so far) only year when political science journals were the leading domain for ESS based publishing, while in other cases the leading domain is sociology, but not nearly as strongly as in the first decade.

The share of articles in economic journals has been between 10-20%, with close to a 20% share for several years after the global economic crises, when increased numbers of analysts examined its aftermath. The share of articles in methodological journals is relatively constant and is largely produced by authors associated with the ESS.

2 RESEARCH TOPICS IN CROSS-DOMAIN AND CROSS-TIME PERSPECTIVE

Like other multi-purpose comparative surveys, the ESS has no single primary application, but contains a **diversity of topics and theoretical approaches**. Rather than seeking to advance one specific model, multi-purpose studies enable studying a multitude of crucial social processes (Hakim, 1982). Being dedicated to the collective interest of their colleagues, surveys such as ESS therefore need to be aware of the varied interests and developments of the field (Kim et.al 2006). ESS core questionnaire was designed with an aim to be relevant for a variety of thematic domains, while rotating modules are a dedicated vehicle to address research gaps in specific domains and to promote ESS use in new domains.

The structure of analysed topics reflects both the content of the ESS questionnaire, as well as the areas where key societal challenges emerge. Figure 4 presents the picture of research topics most frequently investigated by ESS based authors.

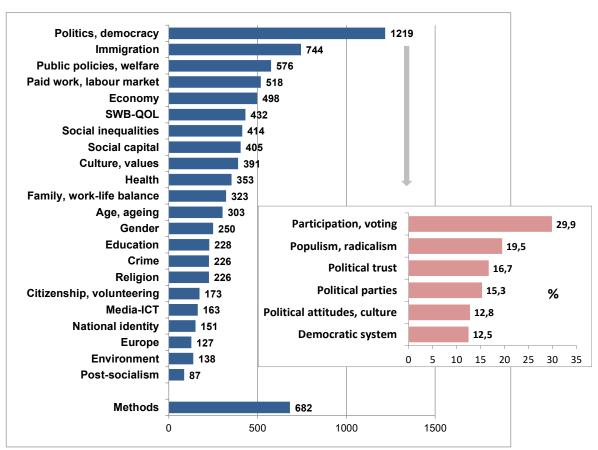


Figure 4: Number ESS publications addressing individual topics (up to two topics coded per publication, 2003-2020, (N=5429)

Among the 5429 publications, 87.4% (4747) are **substantive** and 12.6% (682) **methodological**.

As shown in the chart, *politics* is the most explored subject in the ESS literature, involving a number of theoretical approaches, concepts and theories. In terms of subject matter the most numerous references are to *political parties*, *political trust*, *political elites*, *political culture*, *political responsiveness*, *political efficacy*. A much referred to subject is *political and public corruption*, its causes and effects on institutional trust, its relation to political culture in terms of corruption permissiveness etc.

The second most explored subject is *immigration* which continues to be one of the most pressing social issues facing European countries. A large number of analysts use ESS to test and develop theories in the area of inter-group relations, originating largely from psychological research, e.g. the *intergroup contact theory*, the *social distance theory* or the *group threat theory*. Many authors address the subject of integration of immigrants into host societies, e.g. the *theory of (segmented) assimilation, acculturation theory*. Another widely explored concept is *multiculturalism*, a non-assimilative approach to cultural diversity.

The next prominent topic is *welfare* and public policies, where the most explored concept remains the Esping-Andersen's *theory of welfare regimes*, which postulates that existing welfare regimes act as socialising forces that reproduce the demand for redistribution that legitimises them. Another often referred to concept is *welfare chauvinism*, a belief that immigrants are "free-riders" who receive social benefits without having contributed adequately via taxes.

In the area of *paid work*, the most salient concept is the theory of *human capital*, conceptualising education and its individual and social role. Much explored concept in the area of industrial relations is *union membership*, a collective bargaining mechanism that increases the bargaining power of employees, where analysts investigate its macro and micro determinants.

Family research focuses primarily on *work-life balance*, a long tradition of research on attempts to manage paid work along with family and other parts of life. Closely related concepts are *gender roles*, *gender inequality* and *gender discrimination* which are used to investigate gender-based disparities, particularly in the area of education, paid work and household work. **Demographic issues** are a linked area of research, particularly the issue of *fertility* and fertility decisions, often within the framework of the *life course perspective*. An issue connected to demographic transition is the process of **ageing** and its societal implications in terms of demographic structure, workforce, party membership, ageing electorate, welfare sustainability and others.

Yet another big topic is *culture and values* where analysts typically investigate the mechanism of *social norms* across a number of disciplines and subjects, such as gender and family norms, fertility norms, norms of volunteering, norms of political engagement, work and employment norms, tax morale, as well as transmission of norms, informal control, peer pressure and other. *Cultural change* is another major area of research, e.g. the process of individualisation and the post-materialism theory. *Religion*, a sub-area of cultural change research, is theoretically dominated by the *secularization theory*, a notion that as societies progress and modernize religious authority diminishes in all aspects of social life and governance.

In ESS-based investigation of **well-being**, authors typically explore well-being determinants such as age, illness, immigration status, peer comparisons, welfare regime, social capital and networks, trust levels, economic resources and others. A much explored concept in the well-being area is socially produced *inequalities in health*.

Finally, the topic of *social inequality* is among the most frequently explored, focusing on unequal distribution of income or wealth and interpreted in either functionalist or conflict perspective. The most popular concept remains *social class*, while other key theoretical perspectives include social exclusion or social marginalisation, as well as social mobility.

The success of ESS mission to support a wide scope of analytical approaches can also be examined by observing the structure of academic domains across thematic areas, i.e., the extent of **cross-disciplinary reach of ESS data and indicators** (Table 1).

Table 1: Cross-disciplinary analysis of ESS topics, 2003-2020 (N= 2874)

	e 1. Cross-discipilitary analysis of E33 topics,	JOURNAL DOMAIN					
		Sociology	Political science	Economy	Psychology	Health & Medicine	Other
1	Politics , democratic system, political participation, political parties, populism, left-right placement	19.3	59.3	7.2			
2	Immigration issues, ethnic diversity, ethnic discrimination	50.2	20.7	13.3			
3	Welfare state, welfare attitudes, welfare chauvinism	32.1	41.6	13.5			
4	Paid work , labour market, industrial relations, trade unions	35.1	40.5	15.5			
5	Economy , financial crisis, economic values, consumerism	27.0	24.3	33.0			
6	Subjective well-being, happiness, life satisfaction, quality of life	50.8		17.6	8.4		
7	Social inequalities, social justice, social class, social mobility, income	49.3	18.2	12.0	11.0		
8	Social capital, trust, social networks	37.7	12.1	19.5			
9	Culture, values	29.7		18.1	25.4		
10	Health, subjective health, health system	28.7	7.9			57.5	
11	Family , family roles, norms, marriage, children, work-life balance, family planning	56.6		9.9			18.1 ⁽³⁾
12	Age groups, ageism, the elderly, the young	54.5	15.0	12.0			
13	Gender, gender issues, gender roles	48.1	20.1	11.7			
14	Education, skills, educational inequalities	45.1	11.3	16.5		14.3	
15	Religion, religiosity, religious change	67.2	12.2	6.1			
16	Crime, criminal justice, corruption	18.8	26.2				29.7 ⁽⁴⁾
17	Citizenship, volunteering	37.7	29.9	13.0			
18	Media, internet, ICT	17.6	14.1	10.6			45.9 ⁽⁵⁾
19	Nation, national identity	52.2	20.0		11.1		
20	Environment, climate change, urban-rural	18.1	15.7	13.3			47.0 ⁽⁶⁾
21	Europe, European Union, Euroscepticism	21.7	52.2	18.8			
22	Post-socialism, transition	37.5	47.9	10.4			

⁽³⁾ Demography journals, (4) Criminology journals, (5) Communicology journals, (6) Environment journals

The table shows that most topics hold a dominant share in a particular journal domain (marked in bold), e.g. politics in political science journals, health in health & medicine journals or immigration, wellbeing, family, religion, gender etc. in sociological journals. On the other hand, all topics are also the subject of cross-disciplinary research and appear in journals from various domains. Sociological journals, for example, have significant shares in all 22 topics, in most also political science journals (20) and economy journals (19), while psychology journals have significant shares in three thematic areas. This picture indicates, at least indirectly, that ESS data and indicators are relevant for multiple research communities and are being used to examine societal issues from diverse disciplinary standpoints.

Research topics in the cross-time perspective

Analytical migrations between topics are easier than migrations among disciplines, which makes examining the **cross-time picture of topics** particularly interesting. The dynamic of research topics reflects changes in both ESS questionnaire and the wider societal context. It shows how ESS based analysts adjust their focus relative to these changes and highlight the fact that societal relevance is routinely part of the equation when choosing a research topic.

The following charts present some notable cases where social events or the content of ESS questionnaire affected the salience of a topic in ESS based publications, either due to societal effects, or the effect of rotating modules. The first example (Figure 5) is from the domain of politics, the most frequently explored thematic area by ESS-based analysts.

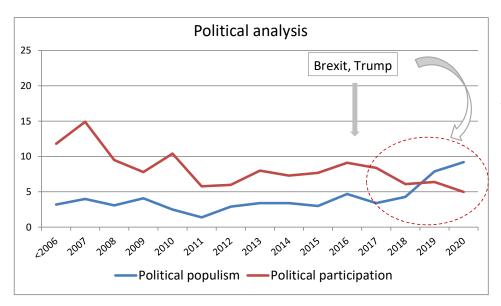


Figure 5: Trends in ESS publishing addressing two political subtopics, 2003-2020, (% shares, N=5429)

An interesting shift occurred between two most popular sub-topics during the 15 year period. The topic of *political participation* dominated in the first 10 years, partly as a consequence of the popular Citizenship module and partly as a reflection of the general research focus in the political science community, i.e. exploring the concept and practice of conventional and non-conventional political participation, political engagement of various social groups, social cohesion and similar. However, the 2016 Trump election and Brexit triggered a shift of focus a few years later (a period required for publications to emerge). Exploring the surge of *political populism* and its mass appeal became the primary focus of ESS based political analysts. For the time being it is not clear how long this shift will last, but

it certainly demonstrates the sensitivity of analysts to societal processes and the potential of the ESS indicators to support scientific exploration of these issues.

The second example is immigration, the second most analysed topic based on ESS data, with around 14% of publications addressing it. This share jumped to over 20% at some point after the simultaneous effects of the 2015 refugee crisis and the Immigration repeat module, which was repeated shortly before it (Figure 6).

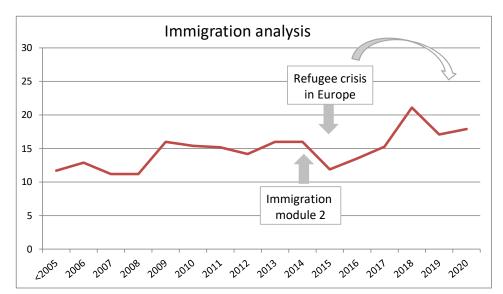


Figure 6: Trends in ESS publishing addressing immigration topics, 2003-2020, (% shares, N=5429)

Figure 7 presents cross-time shares of publications addressing issues related to macro-economic situation. While in the first period the share of such publications was below 5%, the situation changed drastically after the 2008-2009 global financial crisis, with a many-fold increase 4-6 years later. At the peak, almost 15% of publications dealt with the aftermath of the global economic crisis, with authors addressing, among many others, the issues of youth unemployment, the rise of social movements, the rise of radical right, the decline of political trust, the pressure on informal caregiving and the post-crises weakened welfare state.

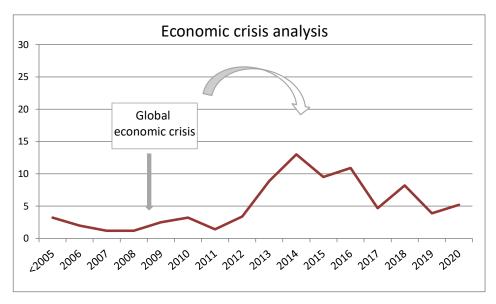


Figure 7: Trends in ESS publishing addressing economic crisis topics, 2003-2020, (% shares, N=5429)

After a few years the interest in this topic began to decline again as other, more pressing social issues began to draw more scientific attention. Again the case demonstrates how mass

analysts respond to societal challenges and how trying to address them, understand them and (often) seek to policy advice is a very important part of the equation of selecting research questions.

Next we present three cases where the **creation or the cycle of thematic modules** plays the decisive role in ESS topic salience. Figure 8 charts the share of the *welfare topic* in ESS publications across time, which is clearly influenced by the cycle of rotating modules. It demonstrates quite effectively how a repeat module revitalizes interest in a topic and increases the share of respective publications a few years later.

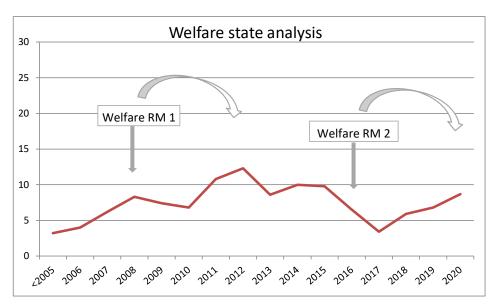


Figure 8: Trends in ESS publishing addressing welfare state topics, 2003-2020, (% shares, N=5429)

Figure 9 depicts the theme of *social trust* and its falling shares after the Citizenship module data aged. The topic is now based on ESS core items, while in the first period the Citizenship battery of voluntary organizations figured very prominently in its use. As noted in previous reports, Citizenship module is the only well-used module that ESS did not repeat so far.

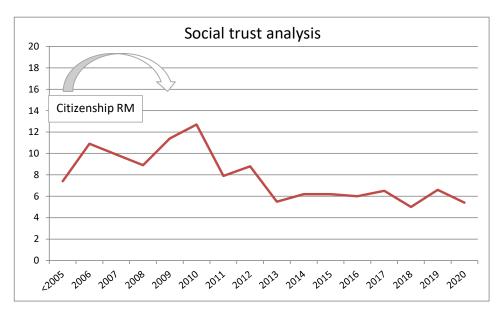


Figure 9: Trends in ESS publishing addressing the social trust topics, 2003-2020, (% shares, N=5429)

Environment is a somewhat opposite case. It has been a widely recognized 'grand challenge' for humanity for at least a decade or two, yet until the Round 8 Climate change module was

designed ESS did not contain items, let alone batteries of items, that would allow addressing it in analytically relevant ways. Following the publication of the new module, the presence of environmental topic rose steeply, with its share reaching 8% in 2020 (Figure 10). This is probably the strongest effect of a new module observed so far. Considering the political and social salience of the issue it can be expected that the presence of this topic will remain strong, particularly after the inclusion of some items into the core questionnaire.

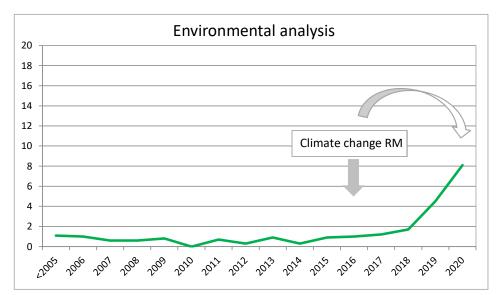


Figure 10: Trends in ESS publishing addressing environmental topics, 2003-2020, (% shares, N=5429)

In sum, while some general topics remain constantly explored, the shares of sub-topics show a rather dynamic cross-time picture in some cases, depending on questionnaire content and contextual events. The trajectory of the environmental topic suggests that Climate change module was rather overdue, which opens the question (along with the 'missing' Citizenship module repeat) of whether a strictly unregulated bottom-up approach in modules selection is always the optimal approach.

3. FINDINGS PRODUCTION ACROSS ESS COUNTRIES

The extent of findings production across ESS countries was explored more extensively in the last year's report. This aspect is particularly relevant for national founders (ESS GA) and national teams (NC Forum) and is measured by the number of academic publications (co)produced in individual countries. It should, of course, be kept in mind that ESS bibliographic monitoring only includes international publications and therefore presents only part of the picture. It is, however, a rather relevant part considering the premium status of international publications, journal articles in particular, in academic evaluation exercises.

As shown in Table 2, the large majority of ESS based publications are produced or coproduced in advanced Wester European countries and the USA (first 10 countries in the table), with 80% of ESS international publications co-authored by writers affiliated in them. In fact, authors from UK, Germany, USA and Netherlands have co-authored 48% of all ESS international publications, which is not a surprising picture as such 'imbalance' has been well noted in the literature. According to Zanotto et al., 24 high HDI countries produce 83.9% of global scientific outputs and 153 low HDI countries 1.9% (Zanotto et al. 2016, p.1797).

Table 2: Number of ESS international publications (co)authored by at least one author affiliated in a country, 2003-2020 (N=5429)

Country of affiliation	N	Country of affiliation	N	Country of affiliation	N
UK	809	Poland	146	Australia	43
Germany	707	France	121	Romania	42
USA	570	Ireland	119	Turkey	36
Netherlands	526	Israel	101	Slovakia	30
Belgium	361	Hungary	94	Bulgaria	26
Spain	350	Estonia	90	Lithuania	25
Sweden	319	Austria	84	Cyprus	17
Italy	302	Greece	73	Ukraine	17
Switzerland	208	Canada	69	Iceland	11
Norway	192	Russia	65	Croatia	11
Portugal	165	Czech republic	62	Latvia	7
Denmark	156	Slovenia	50	Albania	3
Finland	154	Luxembourg	45	Kosovo	1

It is therefore interesting to see a tendency for a somewhat decreasing share of Western authors and a gradual increase in the Eastern European share in ESS authorships (Figure 11). This may, among others, reflect an increasing number of East European member countries, as analysts usually explore their own region. The majority of the Western European countries have been part of the ESS from the beginning so they have less potential for expansion. The trend may also reflect changing requirements in the non-Western parts of Europe in terms of greater emphasis on international publications in academic evaluations.

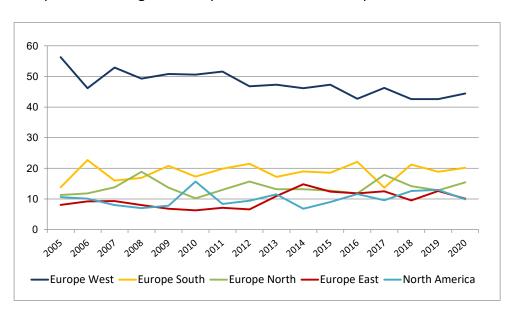


Figure 11: Trends in ESS publishing across regions, 2003-2020, (% shares, N=5429)

With many global links ESS is currently establishing (e.g. US, Japan, Australia, Chile), this picture may change quite significantly in the next decade or so, when a much larger share of global publications can be expected.

5 THE USE OF COUNTRY DATA

The use of country data shows *how well researched a country is* using ESS as the analytical vehicle. As some authors have observed, unequal representation of countries in international surveys limits the generalizability of research results and makes them potentially biased by omitting atypical cases such as less-developed (low income) and non-Western countries (Kołczyńska 2014). Some countries tend to be over-researched, while only limited numbers of surveys exist for other countries, which biases our insights towards the prosperous parts of the world which enjoy a high quality of life (Goerres et al. 2019, p. 90).

Scientific use of national ESS data is of course the final aim of each national fieldwork action. As demonstrated in the previous chapter, the capacity of national academic communities to analytically exploit ESS data is limited, either by their size, their analytical skills and so on. So it is the international academic community, both European and global, that makes the most use of national datasets once they become part of the ESS cumulative data file and contribute their part to its comparative scope.

Table 3 presents the shares of national data inclusion for all countries that participated in at least one ESS round. The shares range from 75% for Germany and less than 5% for Albania and Kosovo, which obviously renders Germany a far more researched country than Kosovo. The main explanation for the large discrepancies is the *number of rounds fielded*, which is usually related to a country's general level of development and funding issues that arise or not arise from it.

In case of countries that participated in a similar number of rounds, *analysts' priorities* in including individual countries also play part. Authors typically address issues that are relevant in their own countries and analyse them on sets of countries that are reasonably similar and where the same issues arise. As a large majority of authors come from Western European countries this is often reflected in their preference towards selecting other western European countries, addressing shared issues such as immigration related problems, political populism or welfare chauvinism.

Table 3: Shares of country data inclusion in ESS international publications, 2003-2020
(N=3720*)

N-3720)					
	%		%		%
Germany	76.0	Poland	63.2	Luxembourg	25.4
United Kingdom	74.8	Switzerland	59.5	Lithuania	24.9
Sweden	74.1	Hungary	59.3	Russia	23.3
Netherlands	73.0	Slovenia	59.0	Ukraine	22.7
Belgium	72.4	Czech republic	55.5	Israel	22.3
Spain	71.4	Austria	50.6	Iceland	19.6
Finland	71.2	Estonia	50.0	Croatia	15.2
France	71.0	Greece	45.2	Latvia	13.4
Denmark	69.2	Slovakia	40.9	Romania	13.0
Portugal	66.1	Italy	37.6	Turkey	11.4
Norway	65.1	Bulgaria	32.4	Albania	4.4
Ireland	64.9	Cyprus	27.8	Kosovo	3.9

^{*} The population of downloaded ESS publications with full texts where country-data inclusion can be established

Country data inclusion across time

Like in other sections, we examined the cross-time trends in the use of national data for most ESS member countries. Figure 12 first presents countries with stable or growing use. These are countries that either participated in all ESS rounds, or missed a few initial rounds and then participated consistently. Unbroken participation more or less 'guarantees' high country-data inclusion, albeit at somewhat different levels for Western and Eastern European countries, as noted previously. Quantitative variable-centred analysis that ESS supports encourages authors to use large sets of countries, often all available countries. Maximizing the number of country units is a requirement for multi-level analysis and permanently present countries are also favoured in multi-round analysis. Therefore positive effects of consistent participation cumulate and result in these countries being highly and consistently researched in a variety of thematic areas.

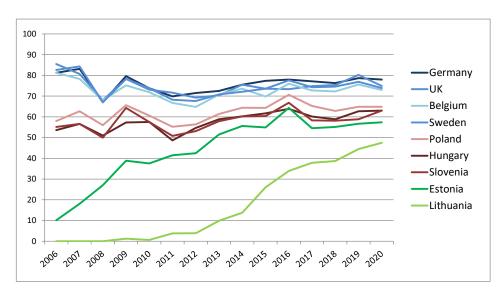


Figure 12: Trends in country data use in ESS publications: cases with stable and rising use, 2003-2020, (% shares, N=3469)

Next are countries with (currently) falling data use, demonstrating the decline in findings production as a consequence of missing one or more ESS rounds. Figure 13 presents three of the initial member countries with high early inclusion rates which later slumped as they began to skip rounds or dropped out of ESS completely (Luxembourg).

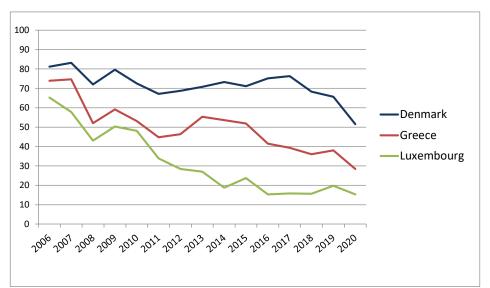


Figure 13: Trends in country data use in ESS publications: cases with falling use, 2003-2020, (% shares, N=3469)

Even Denmark, with only Round 8 missing, has experienced a significant drop in its data use (about 30%). Nonetheless, some usage remains due to continuous analytical use of earlier rounds (see section 8). The second group (*Figure 14*) are countries that joined ESS later and dropped out again at some point, many after the year 2013 when ESS became an ERIC and the participative system of central financing was introduced.

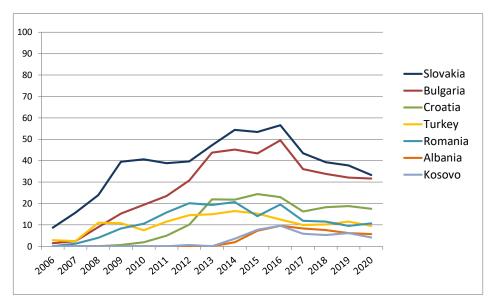


Figure 14: Trends in country data use in ESS publications: cases with rise and fall in use, 2003-2020, (% shares, N=3469)

After the process of formal re-joining gained momentum, the ESS membership situation has been improving again, particularly in the last few years, which will reflect in many of these usage trends getting reversed in the future. Figure 15 demonstrates such reversal trajectory for five countries that re-joined ESS after skipping a wave or more. The *recovery of country-data inclusion* after participation becomes consistent is therefore a fairly predictable process, but is stronger and faster in countries with higher 'comparative value' for the majority of analysts.

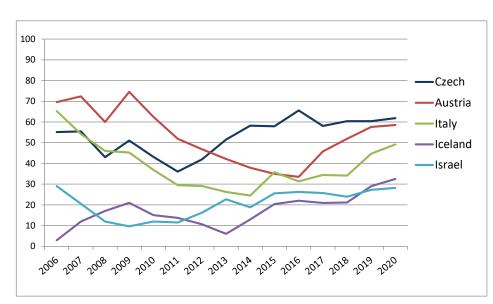


Figure 15: Trends in country data use in ESS publications (cases with recovering use), 2003-2020, (% shares, N=3469)

In sum, only wide and stable membership can ensure that all European regions get researched to a relatively equal extent using ESS data.

6 THE USE OF QUESTIONNAIRE SECTIONS

Questionnaire content, from individual items, blocks of items and modules, is any survey's essential parameter, framing its **analytical possibilities**, i.e. the scope of topics and theoretical approaches, types of academic communities engaged and similar. ESS core questionnaire was created by the ESS central team and external thematic experts. Its designers sought to include topics that are of enduring interest for most researchers in the social sciences (and beyond), along with a wide range of socio-demographic variables. On the other hand, rotating modules represent a bottom-up element in the ESS, making it wide open to the scientific community. They are ESS 'project' sections designed to fill a research gaps in various academic domains. As a long-term infrastructure, ESS had to find a compromise between innovation or adaptability and longitudinal stability and rotating modules are the main vehicle for the former (Schnaudt et al., 2014).

In the 2021 report, the use of questionnaire sections is based on 3577 downloaded publications where item use could be established. The minimum criterion for documenting the use of a section was at least one item found. The *A, B, C core part*, which is not shown here, was used in 3005 or 84% of downloaded publications or a large majority of them. This demonstrates the conceptual potency the core parts, as well as the benefits of biannual fielding frequency which results in a continuously refreshed time-series, making core the most relevant part of the questionnaire in terms of trend analysis, cross-round merging, increasing sample sizes etc.

Figure 16 shows the **overall use of rotating modules and PVQ.** Portrait Values Questionnaire, the ESS values battery which is also part of the core, is used in 14.3% of publications. The overall picture of most used modules has been fairly stable during the last decade, with *Immigration* and *Work & Family* on top, followed by *Welfare* and *Wellbeing*.

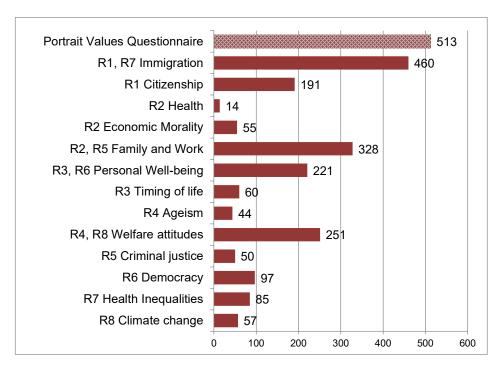


Figure 16: The overall use of ABC Core and rotating modules (2003-2020, N=3577)

The list of most used modules would probably include *Citizenship* if it were repeated, but has now aged and is not being used to any significant extent. The rest of the rotating modules in

rounds 1 - 6 have a narrower academic reach and are being used by smaller, more niche academic audiences.

Figure 17 presents the picture of modules use for the most recent complete publishing year, which is **2020**. The two most used modules in the last year's publications were *Immigration* and *Welfare*, both of them were recently repeated. The third most used module was *Climate change*, which has a clear potential to become the fifth ESS wide-appeal module in the future, considering the salience of the climate change issues.

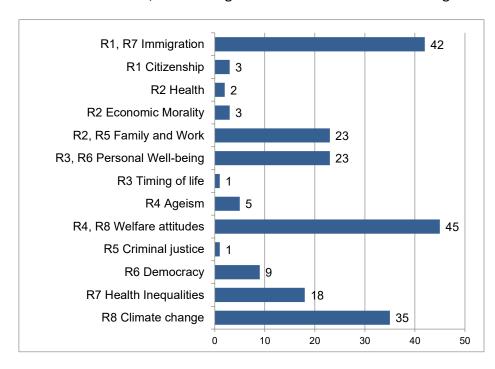


Figure 17: The use of rotating modules in publication year 2020 (N=436)

Next, we present the cross-time trend for the use of questionnaire sections. Figure 18 shows sections with relatively **stable use**. Sections with enduring interest to analysts are, in particular, ABC core, PVQ and the three wide appeal rotating modules.

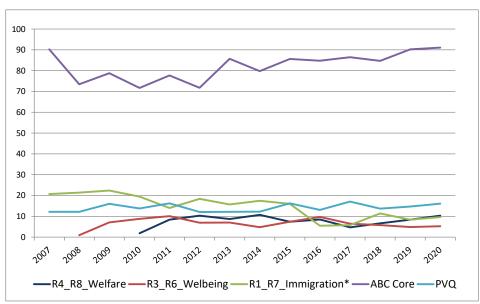


Figure 18: Trends in questionnaire section utilization in ESS publications (sections with stable use), 2003-2020, (% shares, N=3577)

^{*} Change in methodology in 2016

Figure 19 depicts the use of rotating modules with *decreasing* use, most radically in the case of two one-off modules, *Citizenship* and *Economic morality*. While the publishing life of repeat modules is cyclic, with their use 'revitalised' to various extents with each new wave, the use of one-time modules gradually dries up, due to data aging. Adding a fresh time point is the only way to revive and increase the analytical value of the original measurements. The drop in the use of *Family & Work* is mostly due to the fact that it started really strong, with much less 'competition' from other modules in the first few rounds, as well as the fact that its latest iteration is now 10 years old.

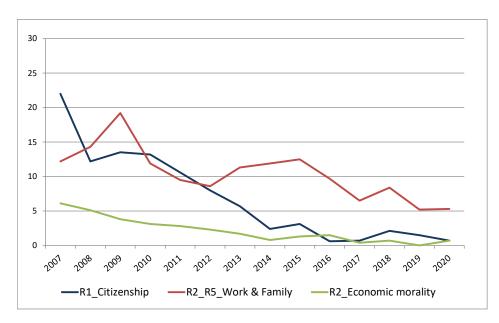


Figure 19: Trends in modules utilization in ESS publications (cases with falling use), 2003-2020, (% shares, N=3577)

Finally, Figure 20 presents cross-time usage for four of the more *recent modules*. *Criminal justice* seems to have reached the final stage of its use cycle for a one-time module, while *Democracy* and *Health inequalities* exhibit solid use. However, none of the new modules so far lifted off as steeply as *Climate change*. The picture reasserts its high relevance for academic audiences, i.e. the fact it filled a significant gap in the ESS thematic chart.

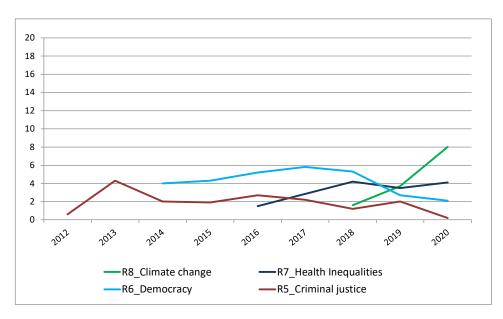


Figure 20: Trends in utilization of recent new modules in ESS publications, 2003-2020, (% shares, N=3577)

As suggested in previous years, ESS should consider repeating (at least) parts of successful one-time modules to revive them from their current unused state where their relevance has been reduced to largely historic aspects. This partly applies to Family module as well, whose third iteration would be desirable at this point.

7 SOCIAL CONTEXT AND ITEM RELEVANCE

Individual items are the smallest questionnaire units and are the basis for monitoring the use of questionnaire parts. Their usage statistics is also one of the criteria for making questionnaire revisions in the Core and repeat modules (full item usage statistics is available in *Appendix 2*). In this year's report the main focus is to the dynamic of item use across time, particularly in relation to societal context that co-determines analysts' research preferences.

Table 4 first presents **10 most used ESS individual items** from the ABC core, both overall and for the last publications year. In some cases there are considerable differences between the two, most notably in the case of *Left-right placement* item. This illustrates how item use is not a static category, but depends on the wider topic and sub-topic dynamic as all items represent concepts that carry different relevance for different topics.

Table 4: Ten most used ABC core items and concepts	Table 4:	Ten most used	ABC core	items and	concepts
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Rank		Label	%	%
	Variable		overall	2020
			N = 3698	N = 436
1	PplTrst	Trust in people	18,0	18,1
2	LRScale	Left-Right scale	16,5	26,4
3	Health	Subjective health	12,6	11,2
4	TrstPrl	Trust in parliament*	13,6	16,5
5	BrnCntr	Was Respondent born in the country	12,8	11,7
6	STFlife	Satisfaction with life	12,1	9,6
7	RlgDgr	Degree of religiosity	12,3	15,4
8	ImUEclt	Immigrants undermining culture	11,5	15,8
9	ImBGEco	Immigrants good-bad for economy	10,6	14,9
10	ImWBcnt	Immigrants make country worse-better place	9,6	11,7

^{*} Applies to all institutional Political trust items (politicians, legal system, police, parties are used in around 8-11% of publications, often as index)

The next few charts are dedicated primarily to observing the relationship between item use and wider societal context, focusing on cases where there were *shifts in item usage due to societal events* or processes.

Figure 21 presents the use of *trust in people* item, which was initially extremely high, with usage shares reaching between 25-35% of annual ESS publications. Round 1 and 2 were the only two rounds available in the first 5-7 publication years so their items had very high usage shares, particularly core items that associate with the citizenship theme. The red line shows the use of the *Left-right* self-placement scale which was always strong, but with considerably lower shares than social trust. However, with the *surge of the populism topic* the LR item that measures respondent's ideological placement has now 'overtaken' the social trust item as the most used ESS indicator.

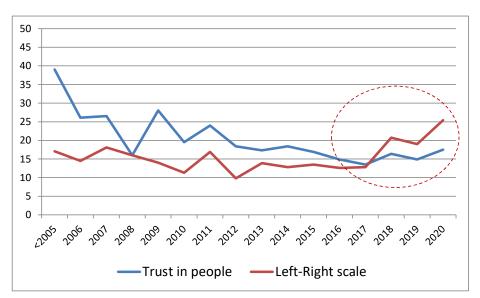


Figure 21: Trends in utilization of items in ESS publications – Trust in people and LR scale, 2003-2020, (% shares, N=3698)

The social capital topic now holds considerably lower shares among ESS publications, a thematic shift reiterated by the drop in the use of 'How often meets people' item (Figure 22). This is both the effect of social context and questionnaire content, i.e. the R1 Citizenship module strongly promoted the exploration of this topic in the initial years.

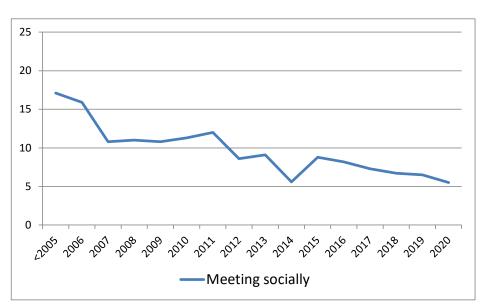


Figure 22: Trends in utilization of items in ESS publications – Meeting friends, 2003-2020, (% shares, N=3698)

There are also item usage shifts related to the dynamic of subtopics. The following example comes from the area of politics and political attitudes, the leading domain in the population of ESS publications. For most of the observed period the 'Did you vote' item that measures political participation in general was dominant in publications researching political system and attitudes. However, after the thematic turn towards populism and towards exploring the background of populist voters, the item 'Which party voted for' became the dominant one. It is now the key variable for identifying respondents with political sympathies for the populist parties. The shift demonstrates how a relative 'analytical value' of an item may depend on contextual factors and cannot be fully predicted by questionnaire designers (Figure 23).

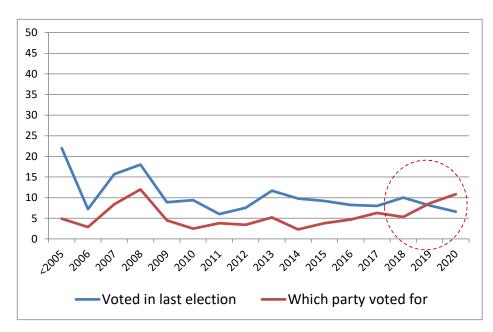


Figure 23: Trends in utilization of items in ESS publications — Voted in last election and Party voted for, 2003-2020, (% shares, N=3698)

Figure 24 presents another marked example of contextual effect on item use, this time for the item 'EU unification gone too far.'

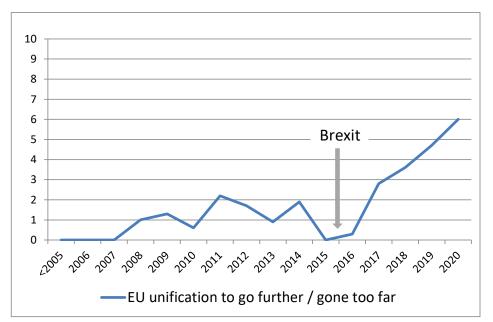


Figure 24: Trends in utilization of items in ESS publications – EU unification, 2003-2020, (% shares, N=3698)

Before the 2016 Brexit referendum the item was of relatively little interest to political analysts and seemed to capture a relatively marginal area of political attitudes. The fact that it was not present in rounds 1, 4 and 5 reflects its relatively low priority in the ESS core questionnaire. After Brexit though, the benefits of EU membership have become a real and highly divisive political issue in most European countries, which is reflected in an exponential growth in the use of the item. It became a strong analytical tool that splits respondents along ideological lines, both in the UK for retrospective Brexit analysis, as well as in other countries to identify respondents with anti-EU and largely populist orientation. It presents another example of the sometimes dynamic nature of an item's relevance relative to societal (political) context.

Finally, we examine four immigration items that are now part of the core questionnaire (Figure 25). Immigration topic is clearly very popular among ESS based analysts and its presence has further grown after the 2015 migrant crisis. However, this does not affect all items equally. While the use of items asking about *allowing certain groups* of people into a country has actually dropped in the last two publishing years (a period when after-crisis publications began to massively appear), the use of items measuring the *effects of immigration* is growing. It is therefore not straightforward to predict which items will be key when research interest in a topic surges.

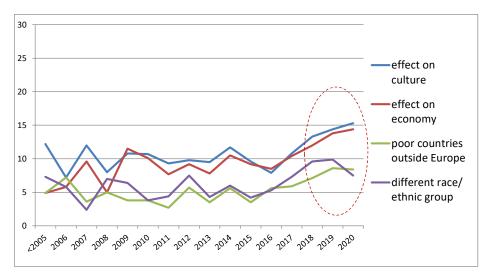


Figure 25: Trends in utilization of items in ESS publications – Immigration, 2003-2020 (% shares, N=3698)

In conclusion, societal context often affects and modifies items' analytical relevance which complicates the process of questionnaire revision. A previously little used item, possibly even a candidate for cutting, may suddenly become highly valuable by analysts in a particular domain.

8 THE CYCLE OF ROUNDS USE

Rounds usage statistics shows the dynamic and number of rounds typically used. It provides insight into the *process of data ageing* which simultaneously increases and decreases its analytical value, depending on analytical aims.

Data on the use of individual rounds was obtained from 3657 downloaded publications where specific rounds could be identified. Figure 26 presents the cycle and level of rounds use and shows a remarkably steady pattern. The use of each new dataset starts immediately and reaches its peak in academic publications about 4-5 years later. Each round's usage then begins to stabilize at about 35-55%.

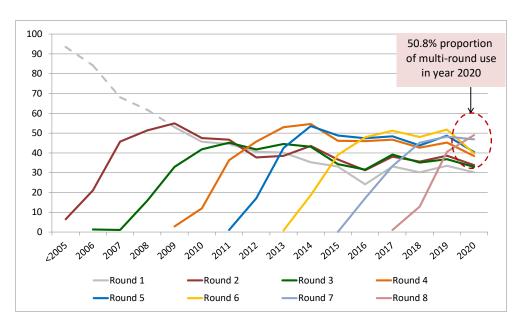


Figure 26: The cycle of rounds use in ESS publications, 2003-2020 (% shares, N=3657)

The continuous use of earlier rounds is driven by widespread *multiple-round use*, with analysts either making cross-time comparisons but more often pooling rounds to increase sample sizes, or both. Multi-purpose surveys are designed to be repeated at regular intervals and allow monitoring and modelling of societal change and studying of sub-groups by pooling cases. (Kim et.al 2006). Merging several years' data is a popular design to either achieve a sufficiently large sample to study a minority group, or to permit the use of detailed classifications, i.e. occupation (Hakim, 1982).

In 2020, the latest publication year observed, more than 50% of publications used multiple ESS rounds, on average more than 3. The average number of used rounds has been rising steadily in the last 15 years (Figure 27). While the strategy of enlarging samples by using multiple rounds may favour more recent datasets, which are more comparable in terms of social context and surveyed population, the value of earlier rounds will continue to increase in cross-time analysis. As a result of both strategies all ESS rounds are still being used extensively, though not necessarily all questionnaire parts.

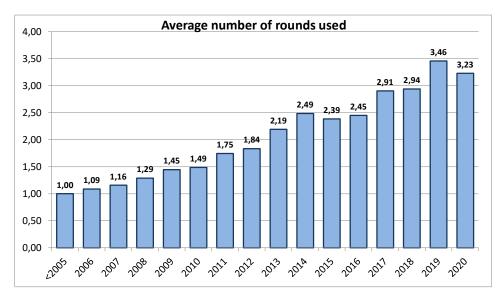


Figure 27:
Average number of rounds used in ESS publications, 2003-2020 (N=3657)

9 ANALYTICAL FEEDBACK

This section provides brief feedback on some non-substantive bibliographic variables that mostly indicate the level of *methodological awareness* among ESS based authors and their citation styles. ESS was created with a specific aim to overcome long-lasting methodological deficiencies in comparative research so it is interesting to see if this methodological concern is, indirectly, reflected among ESS based authors. It is also relevant for replication purposes.

The vast majority of ESS based publications provide information on survey years used, the countries included and more or less complete description of items and variables used. Other replication information is less complete. Data file edition is cited in 23.9% of publications and references to the use of weights were made in 35.6% of publications (Figure 28). ESS response rate was provided in 14.6% of publication and 38.2% of publications a reference was made to ESS web pages, which provides some insight into its visibility and utility.

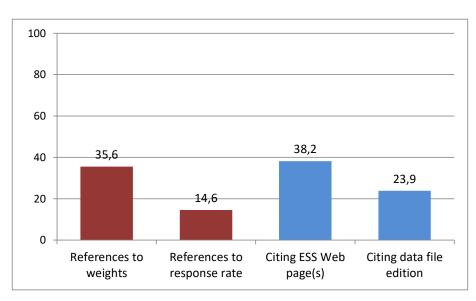


Figure 28: Indicators of methodological awareness and replication, 2003-2020 (% shares, N=3720)

Cross-time chart (Figure 29) shows that citing ESS web pages, where authors usually aim to provide a link to general ESS information, and response rate where they demonstrate methodological awareness is decreasing somewhat.

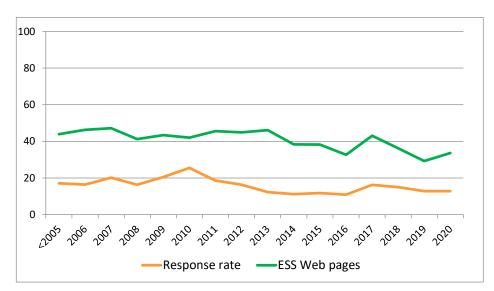


Figure 29: Referring to ESS response rate and web pages, 2003-2020 (% shares, N=3720)

On the other hand, mentioning the use or non-use of weights is rather stable, with 30 - 40% of publication containing this information, while citing ESS file edition has been growing steadily through the observed period, mostly as part of the ESS recommended citation format, which seems to be the ever more prevalent choice.

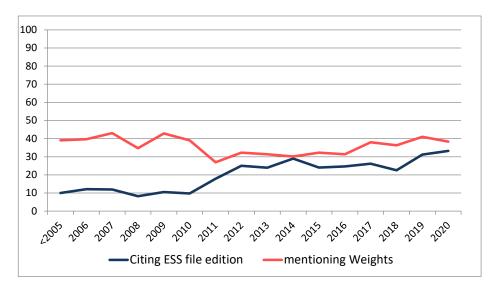


Figure 30: Citing ESS file edition and use of weights, 2003-2020 (% shares, N=3720)

10 INFORMING POLICY

In addition to the production of scientific findings, informing policies is the second key ESS goal, similar to other publically funded research programmes in social sciences. Governments fund multi-purpose comparative surveys that are under academic control, but expect *general policy returns*. Surveys funded by national research councils (are expected to) cover both policy issues of concern to departments, and the theoretical and disciplinary interests of academic researchers, as well as broader policy issues (Hakim, 1982).

ESS annual bibliographic reports include two general, yet robust indicators of this component. The first one is the number of keywords 'policy' or 'policies' in the body of the text, which indicates the 'intensity' of authors' policy orientation, and second, the type of policy that is mentioned. Measured by these indicators, references to policies are made in 79% of ESS based journal articles, the publication category selected for our analysis due to its wide accessibility and standardized format (Figure 31). On top of the chart is a group or articles that discuss government policies in more general terms, without a clear focus on specific domain. In the majority of articles though references are made to specific policies, most notably in the welfare and immigration domains that feature in several hundred articles, but also labour market, family and macroeconomic policies.

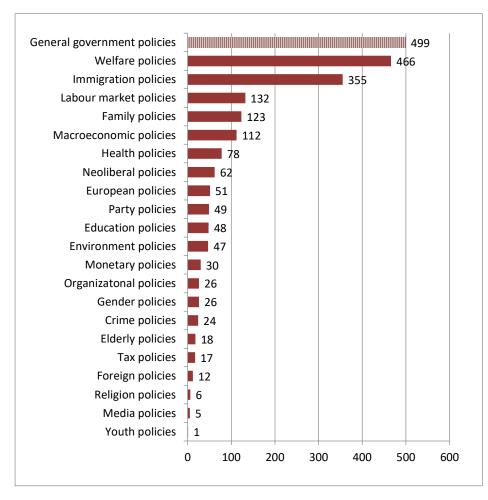


Figure 31: Domain structure of policy references in ESS based journal articles, 2003-2020 (N=2369)

The cross-time picture, presented in Figure 32 shows that the two policy areas with a constantly strong presence in ESS articles are again welfare and immigration, indicating the permanent policy salience of these issues. However, while the share of welfare policy references was quite dominant between 2007-2016, this is not the case in the last five years, with immigration policy content being at least equal. This again demonstrates a shift in thematic, and consequently policy focus towards immigration issues. On the other hand, environmental policy references that used to be rare have risen steeply once the Climate change module became analytically used, as practically all of these articles are strongly policy oriented (see figure 33). It can be expected this policy area will be among the strongest in the future decade.

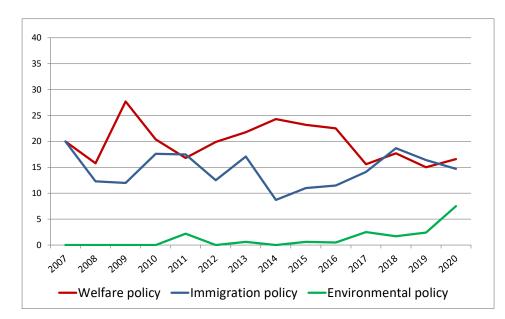


Figure 32: The dynamic of policy references in ESS based journal articles (1), 2003-2020 (% shares, N=2369)

Another area with strong policy component is *macro economy and labour market*, particularly in the period after the 2008-2009 global crisis. *Family policy* references (including life – work balance) are present to a somewhat lesser extent, but quite constantly over the observed period.

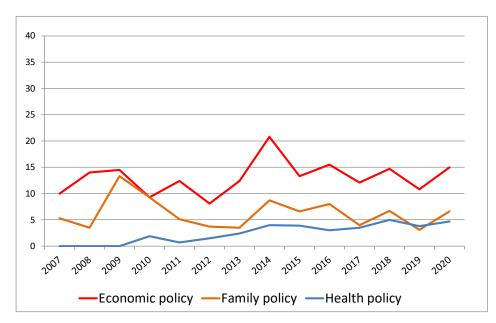


Figure 33: The dynamic of policy references in ESS based journal articles (2), 2003-2020 (% shares, N=2369)

On the other hand, *health policy* references show slow but steady increase. The topic of health is one of the strongest in ESS, but many medical authors do not include policy advice, which may now be changing. Policy content in this domain is likely to expand considerably when post-pandemic publications will begin to be published, exploring the global effects of Covid-19.

The final chart shows to what extent topics are policy oriented based on the average number of keywords policy/policies present in respective articles (Figure 34). The discrepancies are large. Articles addressing welfare system have extremely high average of policy references, which is to be expected. Other 'policy intense' domains include

environment, European integration, immigration and work-family issues, with articles in this areas containing on average two or three times more policy keywords than publications dealing primarily with micro level topics such as values, religion, social capital or subjective well-being. With environment being one of the most policy oriented topics, Climate change module has clearly opened a path into a new domain of ESS based policy relevant knowledge.

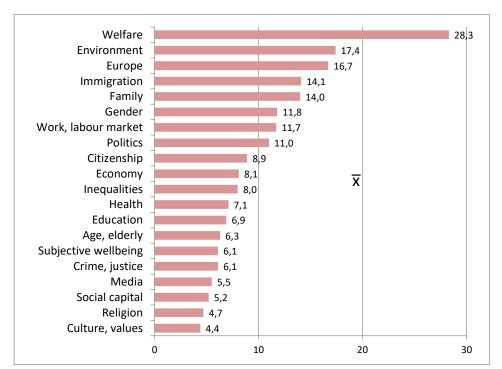


Figure 34:
Average number of keywords 'policy' and 'policies' in publications addressing different topics, 2003-2020 (N= 2367 journal articles)

All in all, the strong presence of policy component in ESS publications justifies the expectations of ESS funders to inform public policies. Generating societal impact in terms of 'general policy returns' is clearly a prominent goal in authors' choice of topics, as well as when drawing conclusions from their studies. At least to some degree, most authors seek to pursue the 'solutionist' dimension of research (Prenzel 2016) by highlighting policy implications of their findings and putting them in the context of societal issues, not least in order to highlight the wider relevance of their research.

In conclusion, keywords search and policy type mapping in ESS publications can indicate in which areas ESS-based policy-informing is potentially strongest. However, the extent to which policy relevant information is being used by decision makers across ESS countries and its specific paths are much better explored by a triangulation of methods, focusing particularly on case studies (e.g. the Technopolis report, by Kolarz et al., 2017). The intention here is merely to demonstrate the general policy relevance of ESS data.

11 KEY TAKEAWAYS

On the 20th anniversary of its first fieldwork exercise, ESS continues to demonstrate its scientific relevance both by the number of scientific publications and their theoretical content, as well as the spread of its academic usage across disciplines and policy domain references. It is one of the leading European comparative data sources on a number of social issues such as immigration, political participation, work-life

conflict, subjective wellbeing and others. ESS methodological rigour and fast growing cumulative samples offer plentiful opportunities for developing theories and informing policies. ESS is also likely to be one of the most anticipated data sources to analyse the Covid-19 pandemic and its aftermath, both owing to its standard longitudinal indicators and the specific questionnaire included in R10.

- The pattern of ESS academic **user groups** shows that the audiences ESS creators were primarily targeting has been reached, most notably in the domains of political science, sociology, economy, psychology and health. There seems to be a growth in the share of publications in political sciences journals in the last 5 years, mostly as the result of societal contextual effects.
- While some **key topics** remain constantly explored, most notably politics, immigration, welfare, wellbeing, the effects of economic conditions etc., their shares often show a dynamic cross-time picture, depending on questionnaire content and societal events and processes. A notable case is a surge of populism research in the recent years. Environment is a fast growing topic among ESS analysts and is likely to remain strong after the addition of the climate battery into the core questionnaire. Most topics are cross-disciplinary and appear in journals from various domains, indicating that ESS data and indicators are relevant for multiple research communities and are being used to examine societal issues from diverse disciplinary standpoints.
- There is a gradual tendency for a somewhat decreasing share of Western **authors** in the population of ESS publications, and a gradual increase in Eastern European share. The latter may reflect increasing number of East European member countries, as authors usually explore their own region. With many global links that ESS is currently establishing, the picture of authorships may change quite significantly in the next decade, when a much larger share of global analysts can be anticipated.
- The **use of country data** shows how well researched a country is using ESS as the analytical vehicle. There are large differences between countries in this respect, mostly as a consequence of data availability, i.e. the (non)consistency of participating in ESS fieldworks. Only wide and stable membership will ensure that all European regions get researched to a relatively equal extent.
- The attitudinal part (A, B, C section) of the **ESS questionnaire** has been used in a large majority of publications, while the most popular modules remain immigration, welfare, family and wellbeing. Climate change has a clear potential to become another widely used ESS module, considering the salience of the climate change issues.
- The association between item use and societal context may affect or **modify item relevance**. The most notable cases are the left-right scale item and the EU unification item, which use has starkly increased after the 2016 Brexit and the rise of populism. This relationship may complicates the process of questionnaire revision as a little used item may become highly valuable by analysts at some point.

- The surge of environmental analysis indicates the Climate change module was overdue, which opens the question of whether a strictly unregulated bottom-up approach in **modules selection** is always optimal. This is also true for repeating the popular Citizenship module and perhaps the pending Family module repeat. As an alternative, ESS could consider repeating parts of successful one-time modules to revitalise their use.
- Part of the ESS mission is to inform public policies and provide general policy returns. References to policies are made in the large majority of ESS based journal articles, most often in the domains of welfare, immigration and work-life balance. With environment being one of the most policy oriented topics, Climate change module has clearly opened a path into a new domain of ESS based policy relevant knowledge.

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