

Stability and Change in Political Trust: Evidence and implications from six panel studies

Daniel Devine*

St Hilda's College, University of Oxford

daniel.devine@st-hildas.ox.ac.uk

Viktor Orri Valgarðsson

University of Southampton

v.o.valgardsson@soton.ac.uk

Abstract

Are political attitudes a stable feature of individuals or a rational response to changing circumstances and contexts? This question has long been a feature of political science, and underpins our theories of how political attitudes are formed and what their consequences might be. In this paper, we explore this perennial question with a focus on the case of political trust, a fundamental indicator of democratic legitimacy and a long-standing topic of debate. Theoretically, we devise a framework that highlights how different theories of political trust assume different levels of stability or volatility, and the implications that this has for those theories and their normative consequences. Empirically, we study within-individual stability of political trust using six panel studies that cover five countries between 1965 and 2020. Our results consistently point to trust being stable in the long-term, with potential for short-term volatility in response to changing political contexts, and for substantial changes between people's formative years and their adulthood. Even over a period of 19 years, most people's responses to trust questions are remarkably similar between surveys, and significant life events such as unemployment and going to University do not significantly influence trust. Changes in the political environment, like incumbent government turnover, have larger effects but these appear to return to equilibrium in a few years. The exception to this general finding is individuals who are first surveyed when they are under the age of 18, who appear much more likely to change their trust levels in subsequent waves. Overall, our results complement previous research on attitude stability, indicating that trust is approximately as stable as other attitudes, such as towards immigration and redistribution. These findings have fundamental implications for our understanding of the nature of political trust and of attitude formation more broadly.

Word count: 8817 (excluding cover page and Appendix)

Forthcoming in the European Journal of Political Research

*Corresponding author

In motivating a case for the instability of individuals' attitudes, Zaller (1992, p. 53) recounts the story of a teacher interviewed as part of the 1987 American National Election Study. In one interview, the teacher passionately made a case for greater government spending, citing a crisis in education provision in the country. Being part of a panel study, the teacher was revisited four weeks later; they now argued that government was too big, too overbearing, and advocated for substantial reductions in government spending. Zaller's argument was that most respondents exhibit substantial volatility in their attitudes, even on quite core dimensions like government spending, and even to the extent of being contradictory. From Lippmann (1922) to Converse (1962), the foundational public opinion literature shared this somewhat cynical view of individuals' ability to hold consistent attitudes.

The degree to which political attitudes are stable or volatile has long been considered one of their most important attributes: it sheds lights on their nature, how they are shaped, and how they evolve over time (Key, 1961; Robinson, 1964). In this paper, we contribute to that perennial debate with a focus on the case of political trust. Part of the broader concept of political support, which refers generally to citizens' attachment to their political regime and community (Easton, 1965), political trust refers more specifically to citizens' feelings about the institutions and actors governing their polity (Citrin & Stoker, 2018); their 'basic evaluative or affective orientation towards government' (Miller, 1974, p. 952). The objects of political trust most commonly include the national legislature and executive as well as political parties and politicians - and sometimes related objects such as the judiciary, civil service and law enforcement (Uslaner, 2018; Zmerli & van der Meer, 2017). Trust is thought to be an inherently important legitimizing quality of democratic government and a cause of other important outcomes, such as policy and law compliance (Krupenkin, 2021; Marien & Hooghe, 2011), policy preferences (Macdonald, 2021) and political participation (Valgarðsson et al., 2021).

Conceptually, one of the long-standing debates about political trust is the extent to which it is a stable trait reflecting a culturally entrenched orientation about the political system's

legitimacy ('diffuse support') (Easton, 1975, 1976), or a more volatile attitude which may be moved by the ebbs and flows of political life ('specific support') (Dalton, 2004; Norris, 2011). This debate reflects broader debates about attitude formation, but it has specific theoretical and normative implications for the study of trust in particular. First, it tells us about the nature of trust and how we interpret it: whether it is an expression of system legitimacy or, instead, a rational assessment of government performance which enables more short-term mechanisms of democratic accountability. Second, if it is the latter, then stability is not necessarily a desirable trait as Zaller and others (e.g., Converse, 2006) posited for other attitudes: we would want trust to vary with performance and, ultimately, the trustworthiness of institutions and actors.

Understanding the stability or otherwise of political trust therefore informs us about its nature, determinants and normative implications. Explanatory theories of political trust formation typically make an assumption about stability: theories that emphasise long-term, generational changes (Dalton, 2004; Inglehart, 1997) or dispositional determinants (Intawan & Nicholson, 2018) imply that political trust is stable, whilst those that emphasise government performance, scandals (Bowler & Karp, 2004), election results or negative media coverage (Norris, 2011), for instance, imply that trust is rather malleable. These are often described as 'cultural' versus 'institutional' theories (see Schoon & Cheng, 2011). If trust were stable, these latter theories likely have lower explanatory power, at least in the long term. If trust were very volatile, the former theories would lose credibility and we would need to revert to the latter - or perhaps even back to earlier concerns about the fundamental volatility of public opinion. These questions also have practical and normative implications: they help us understand what to make of the generally low or declining levels of trust in many established democracies (Citrin & Stoker, 2018) - is it a fundamental crisis of legitimacy, or a more innocuous temporary dissatisfaction with government?

In this study, we provide the most comprehensive analysis of the (in)stability of political trust attitudes to date, using six long-term, nationally-representative panel studies from

the United States and four European countries - Britain, Germany, the Netherlands and Switzerland - between 1965 to 2020. Our core finding is that trust is characterised by medium-to-long-term stability with the potential for some short-term volatility in response to the political environment. We evidence this with two analyses. First, we show descriptively that individuals are remarkably stable in their surveys responses. Even in our longest panel, covering 19 years (in Switzerland), 58% of respondents changed their trust responses by no more than one category on a 10-point scale over the entire period. We also show that this instability does not in general increase substantially over time; the average change between the first and second waves and first and last waves are quite similar in all of our panels. We also apply latent growth models to three of the most frequent panels which takes into account (variation in) individuals' different trajectories, and these results remain robust. Even in Britain, which experienced three elections, a referendum, and considerable political volatility over the period covered, we observe more stability than volatility. However, we also show that those interviewed in their youth and early adulthood are substantially more volatile, providing support for socialisation theories of attitude formation.

In our second set of analyses, we ask to what extent changing *individual* and *political circumstances* affect individuals' political trust levels over time. Using within-between multilevel models, our results indicate that differences *between* people in terms of education, income, ideology and other qualities explain differences in trust, but that individuals *changing* on these qualities is almost entirely unrelated to changes in political trust. We then use impact functions to understand the potential effects of government turnover in the Netherlands, which indicates that incumbent turnover at elections has a sizeable effect on the trust levels of the winners and losers respectively, but that these effects subside after a year or so. Thus both changing individual and political contexts, even in most-likely areas such as becoming unemployed or losing an election, have minimal consequences for political trust. Overall, our results suggest that i) individuals' trust attitudes are quite stable across long periods of time and in relatively tumultuous political environments and ii) trust attitudes are minimally responsive to changing individual

circumstances but do respond, albeit briefly, to changing political circumstances. The data we use to reach these conclusions - six panels in five countries over 50 years - is unprecedented in the trust literature in its temporal and geographical coverage.

Our contributions to the political trust literature are fundamental. Conceptually, our results suggest that trust is a more ‘diffuse’ than ‘specific’ attitude, formed in early adulthood and, for most people, consistent over the life course. Theoretically, this points to the primacy of relatively settled factors as determinants of political trust, such as dispositional traits and early-life socialization, rather than relatively short-term factors like performance, scandal, media coverage or specific events. Whilst these are important in other ways, and may matter for some people (especially in their formative years), long-term factors are likely the dominant explanation. An implication of this is that if trust is generally declining (an empirical conjecture still hotly debated, e.g. Zmerli & van der Meer, 2017), this is likely due to generational replacement and the differential socialization of generations rather than long-term individual-level changes among the adult population. Empirically, our analysis brings together, to our knowledge, the largest range of panel data in terms of temporal and geographical coverage in analyses of political trust. Political trust research is dominated by cross-sectional analysis, which is necessarily limited in understanding or explaining within-person change and dynamics. Whilst a handful of other studies use panel analyses, these are typically based only on one country or limited time periods (e.g Bauer, 2018; Boulianne, 2019; Sikorski et al., 2020). Our analysis provides important conceptual, theoretical and empirical contributions to the literature on political trust.

This has implications for the literature on political attitude formation more broadly as well. Despite early concerns motivated by anecdotes like in the opening paragraph, recent research instead argues that attitudes ranging from those towards immigration (Kustov et al., 2021) and redistribution (O’Grady, 2019) to other qualities like political interest (Prior, 2010), political morality (Ansolabehere et al., 2008), and many others (Kiley & Vaisey, 2020), are remarkably stable. Our research contributes to this vein of literature

by highlighting individuals' capacity for stable, consistent attitudes, and therefore adds evidence to the long-standing debate on the sources and meaningfulness of individuals' political beliefs (Converse, 1974; Easton, 1965; Zaller, 1992).

We begin the paper by discussing theories of political trust formation and how they assume some extent of stability or volatility, and review the existing empirical evidence. We then describe our data and empirical strategy before presenting our results. We conclude by discussing the implications of our results for understanding attitude formation and the dynamics of political trust over time.

Stability and Fluctuation in Theories of Political Trust

We organise theories of political trust formation depending on how stable they assume trust to be, arranging them along a continuum from most to least stable. The intention here is to show how most of the primary theories of political trust formation make (implicit) assumptions about its stability. We present these in figure 1. At the most stable end, at the left side of the figure, are those theories that emphasise individual dispositions rooted in biology and psychology, finding that hereditary biological factors and personality traits such as agreeableness, neuroticism and extraversion play a role in political trust (e.g Freitag & Ackermann, 2016). Given that these theories link trust to basic personality traits, and that the latter are extremely stable, they would predict little change in trust.

To the right of these are theories that focus on the role of long-term socialisation and generational differences. These refer to the gradual influence of individuals' social environments, especially during their formative years, which shape their political trust orientations for the long term. These link to the early sociological literature in political culture research (Almond & Verba, 1963; Kiley & Vaisey, 2020; Putnam, 1995). Of these, Inglehart (1997)'s account of generational change is perhaps the most well-known, and has been significantly expanded upon by Dalton (2004) and Norris (2011). Although

2020). This literature also makes a distinction between subjective economic performance (i.e. what the individual thinks about the economy) and objective economic performance (i.e. aggregate changes in GDP, unemployment, inequality, and so on) (van der Meer, 2018). In both cases, a fundamental assumption is that individuals are able and willing to update their trust judgements depending on economic performance (perceived or objective), which is often volatile.

Finally, what we call ‘political event theories’ are the most volatile, suggesting that trust judgements can be moved by individual scandals pertaining to politicians or political institutions (Bowler & Karp, 2004; Maier, 2011; Sikorski et al., 2020) and by short-term media framing of politics and politicians (Barton & Piston, 2021; Craig & Rippere, 2014; Newton, 2006). These are judged as the most volatile, since they suggest that short-term factors such as individual politicians’ conduct and the media’s framing of political events may shift people’s trust judgements, which implies that trust is quite a malleable attitude. A salient recent example is the apparent consensus in political commentary in the UK that a series of scandals in 2021 and 2022 (especially ‘partygate’) has seriously undermined the public’s political trust.

Our basic claim here is that each theory of the determinants of political trust makes a judgement on the malleability of trust, and this applies to theories about perhaps any political attitude. We aim to establish the stability or volatility of trust on the individual level, which speaks to the relative potential explanatory power of each of these theories. Despite fifty years of research and a lot of progress made, it is still the case that the determinants of trust are seen as a ‘protean’ topic with little consensus (Citrin & Stoker, 2018). Discovering the relative stability of political trust will help us move this debate forward. To be clear, our intention is not to directly test each of these theories, nor that this is an absolute question: discovering that trust is stable or otherwise does not mean that theories which rely on one or the other assumption are consigned to the bin, but only that the variation they can plausibly explain is reduced.

Existing empirical evidence

The broader empirical literature generally suggests, quite unlike earlier theoretical work (Converse, 1974; Zaller, 1992), that political attitudes are more stable than not. Issue-specific attitudes, such as on redistribution, immigration and the European Union, show very little change even in response to economic shocks, university education, and social mobility (Kuhn et al., 2021; Kustov et al., 2021; Langsæther et al., 2022; Margalit, 2013; O’Grady, 2019). In addition, some studies on *social* trust suggest that there is almost no movement in that attitude throughout the data used (Sturgis et al., 2010; van Ingen & Bekkers, 2015).

With respect to political trust, there are a few studies using panel data. A set of studies by Claes and Hooghe (2017), Claes et al. (2012) and Hooghe et al. (2015), using 5-year panel data amongst 16-21 year olds in Belgium, indicates that whilst education in individuals’ early years can affect trust, the differences between individuals were essentially already present and stable by age 16, such that further education made no difference to levels of trust. This suggests that trust is relatively stable past middle adolescence. Reaching a similar conclusion using longer panel data from Switzerland, Bauer (2018) shows that becoming unemployed has no effect on political trust, but does affect other attitudes like life satisfaction. In terms of short-term volatility, Boulianne (2019) shows using a 4-wave panel study during a deliberative event that participants’ general political trust was not increased by participation, although trust in government’s decision-making in the specific domain discussed at the event (climate change) did improve. Similarly, van Elsas et al. (2019) and Sikorski et al. (2020) show that scandals negatively affect political trust through quite a sophisticated process: individuals distinguish between different institutions and individual politicians. Haugsgjerd and Kumlin (2020) show that evaluations of government performance do affect trust, though it is worth noting that it is based on a 2-wave panel study which might only capture short-term impact or fluctuations. The evidence from these studies is thus somewhat mixed. Finally, (Schoon & Cheng, 2011) study lifetime determinants of political trust using survey data and report

high consistency between trust measures fielded to the same panel in two panels with a 9-year interval.

The existing literature leaves two gaps which we address. First, no existing study specifically analyses the within-individual stability of trust (rather than the potential effects of specific, isolated factors on trust), which is fundamental to understanding its determinants. Second, existing studies rely on a limited number of survey waves, data sources, or countries, which means results may be limited to particular countries, time periods or surveys and may only tell us whether trust is stable or not in the *short* term. We fill both of these gaps, studying the stability of trust using data from six long-running panel studies in five countries.

Data and methods

Data

Individual panel data is necessary to answer our question since our objective is to study whether *individuals* change their political trust judgements over time. Moreover, we need a long period of time and preferably different political contexts. To that end, we use six panel studies from five countries (the United States, Switzerland, the Netherlands, Germany and Britain) which extend from 1965 (the US) to 2020 (the Netherlands). Our longest panel is the US Youth Panel (USYP), which begins in 1965 and ends in 1997 (32 years). Our shortest are the German Longitudinal Election Study (GLES) 2016-2020 Panel and the US Voter Study Group (USVSG) (4 years). The length of time period covered by a panel is important for studying long-term stability, but the number of waves (i.e. observations for each individual) is also an important consideration for a robust analysis of stability. Whilst the USYP is 32 years long, it only has three waves, while the USVSG has four and the GLES has trust measures in six of its 15 waves. The strength of the USYP over other panels is its length of time, that it is the only one in the United

States, and that it interviews respondents in their youth, to which we return to later. Our central analyses however focus on the three panels that include trust in the most waves as well as over a long period of time: the British Election Study (BES), the Swiss Household Panel (SHP), and the Dutch Longitudinal Internet Studies for the Social Sciences (LISS), which have trust measures in 16, 14 and 12 waves. We summarise our data sources in table 1.

As such, we include a relatively diverse sample of Western democracies in our study: two majoritarian and relatively polarised anglophone countries (US and Britain) as well as three continental European countries with more consensual political cultures (Germany, Switzerland and the Netherlands). Nevertheless, our data selection is also driven by data availability. There is a relative paucity of long-term panel surveys which include measures of political trust; most are in wealthy countries and most tend to be in Western Europe. Since we are interested in the stability of trust in the medium-to-long term, we do not include studies such as The American Panel Survey, which has two waves of ‘trust’ variables over 18 months (and question wordings differ), or The Belgian Political Panel Study (BPPS, 2006–11), which fielded three waves over five years to a sample of adolescents. The strength of our panel selection is that we have variation in all of the most well-studied determinants of political trust: over time, individuals will change work status, income and education; the economic situation varies substantially in the period and countries covered; and there have been political scandals, shocks and changes in the media environment. Considering our overview of political trust theories in figure 1, we are able to observe citizens’ trust throughout a period in which we would expect levels of trust to vary.

The measures of trust used by each project are listed in table 1; The BES asks about trust in ‘Members of Parliament in general’ and the SHP asks about the ‘federal government’. LISS has separate questions for government, parliament and politicians, and we use the latter in the main analyses.² Finally, the GLES asks about trust in parliament, whereas

²In Appendix B.3, we use the LISS data to confirm that, at least in the Netherlands, results are consistent across these different objects of trust - the one slight difference is that trust in government is

Table 1: Data sources, questions and time coverage

Data	Question wording	Response	Years	Waves (with trust)
BES (Britain)	How much trust do you have in Members of Parliament in general?	1 (No trust) – 7 (A great deal)	2014-2020	20 (16)
SHP (Switzerland)	How much confidence do you have in the federal government, if 0 means "no confidence" and 10 means "full confidence"?	0 (No confidence) – 10 (Full confidence)	1999-2018	20 (14)
LISS (Netherlands)	Can you indicate, on a scale from 0 to 10, how much confidence you personally have in each of the following institutions? Government/Parliament/Politicians	0 (No confidence) – 10 (Full confidence)	2007-2020	12 (12)
GLÉS (Germany)	Please state if you trust these institutions or not. The Bundestag?	1 (I do not trust at all) – 5 (I fully trust)	2016-2019	15 (6)
USYP (United States)	How much of the time do you think you can trust the government in Washington to do what is right - just about always, most of the time, or only some of the time?	([Just - W2-3] About always, Most of the time, Only some of the time)	1965-1997	4 (3)
USVSG (United States)	As above	As above	2016-2019	4 (4)

the two US panel studies use the traditional American trust question, about “how much of the time” respondents “trust the government in Washington to do what is right”. It is important to note that we rely on single item measures here. This has drawbacks in terms of measurement error, which could be mitigated by multiple items fielded within each panel wave. However, this means that our analysis is if anything a conservative estimate of stability, since we would expect single item measures to be less stable over time than multiple item measures (and this is indeed the case in other similar studies (e.g Kustov et al., 2021)).

Empirical strategy

Our analysis comes in two parts. Our first strategy follows previous work (Ansolabehere et al., 2008; Kustov et al., 2021; Prior, 2010) with intuitive illustrations of descriptive stability over time. Here, we do this by showing the mean absolute change in individuals’ reported trust between the first and subsequent waves of each panel study, and the percentage of respondents changing their response over time by one or more categories. In Appendix B.1, we also provide Pearson’s correlations between individuals’ trust level in each wave³ and provide latent growth models which take into account individual variation in change. Collectively, these strategies provide a comprehensive, descriptive indication of how much individuals’ trust attitudes change over time.

Our second strategy asks how changing *individual* and *political* factors affect political trust. Our intention is to explore to what extent trust is *responsive* to changing circumstances, rather than directly test theories of political trust as outlined in figure 1; if trust is *not* responsive, it is likely more stable than volatile. First, we test the effects of key demographics - age, education, income and work status - as well as associations with left-right ideology and political interest. We do so using within-between models (Fairbrother,

a bit more volatile in the short term, but the difference is small and dissipates over time

³We focus on absolute changes here because the calculation of correlations is based on deviations from the mean within each wave, which means that potential overall changes in trust levels within each country over time are concealed in those calculations.

2014) which decompose the effects into those that explain differences a) between individuals in the whole period and b) within the same individuals over time. This serves the purpose of identifying whether individuals' changes over the life course, such as education or work status, are correlated with changes in political trust; if they are not, trust is more likely to be stable. Finally, we ask whether *political* context affects trust. Given the large literature on the winner-loser gap and trust boost following elections (e.g van der Meer & Steenvoorden, 2018), we study the impact of incumbent turnover on citizens who identify with the winning and losing parties, using impact functions which track the change in trust before and after an event.

Results

Analysis 1: Attitude stability over time

In figure 2, we show the absolute mean change within individuals from the first wave to each subsequent wave over time. Response scales are standardised between 0 and 1. This shows a remarkable amount of stability in all panels, with the exception of the US Youth Panel. The average change between the first and last waves in Switzerland (SHP), for instance, is just 0.15 over a period of 19 years (meaning an average change of 1.5 on the original 0-10 scale). The absolute change from the first wave also does not increase considerably over the course of the panels: the difference between the first and second waves is very similar to the first and last waves. For instance, in the Netherlands (LISS), the mean change between the first and second wave (13 months apart) is 0.11, and 0.15 between the first and final wave (145 months). Apart from the US Youth Panel, the greatest volatility is in Britain; the mean change from first to second wave (over 4 months) is 0.14, but from first to last (77 months) it is 0.17. This period was one of intense political turmoil in the UK (with the Brexit referendum, its aftermath and three general elections), indicating that trust is at least partly responsive to the changing

political environment.

The USYP displays significant change, however. This panel is unique in that its first wave was conducted when all but three respondents were 18 or 19 years old, following up with them 17 and 32 years later. The volatility between the first and second wave is likely due to the first interview being in youth or early adulthood: the mean absolute change between the second and third waves of the USYP (conducted when most respondents were 35 and 50 years old, respectively) is much lower and similar to the other panels. To explore this explanation, in Appendix C, we disaggregate the sample of the Swiss Household Panel study (the only other dataset in our study that includes respondents under 18 years of age) into those under or over 16, 20 and 25 years old in the first wave. These results, reported in Appendix figure 8, also show that the mean change is much larger for those who are young in their first wave (i.e. under 16, 20 or 25) than for those who are over those ages, and this is especially true for those under 16. As such, these results seem to suggest that while trust is generally stable in adulthood, it may be quite malleable in individuals' formative years, lending support to generational theories of political change. We suspect that the USYP values are to a large extent a product of the age sampling, the longer time period, and the genuine change in trust levels in the US during that period (from the 1965 to 1982).

In figure 3, we present the proportion of respondents that change their trust response and by how many categories between the first, second, and last waves, on the original scales of each panel study. This similarly shows remarkably high response stability. Even in the British Election Study, the most volatile panel except for the US Youth Panel, 73% of respondents changed their response by 1 or fewer categories between the first and last wave, over a six year period (84% between the first and second). Very few respondents in any of the panels changed by more than two categories on their respective scales, even when those scales ranged from 0 to 10. This does not seem to change considerably the longer time passes from the first wave; 58% change one or fewer categories in Switzerland from the first to last wave, and 64% from the first to second wave. In all of the panels,

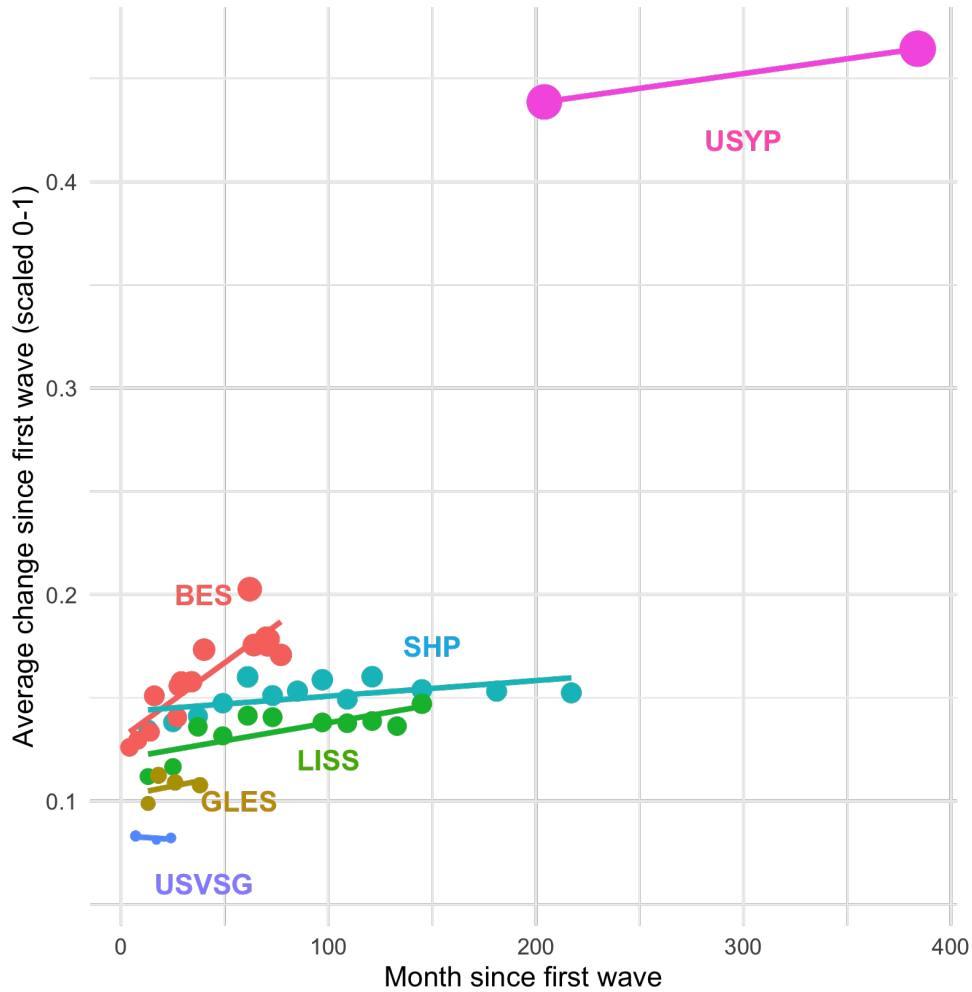
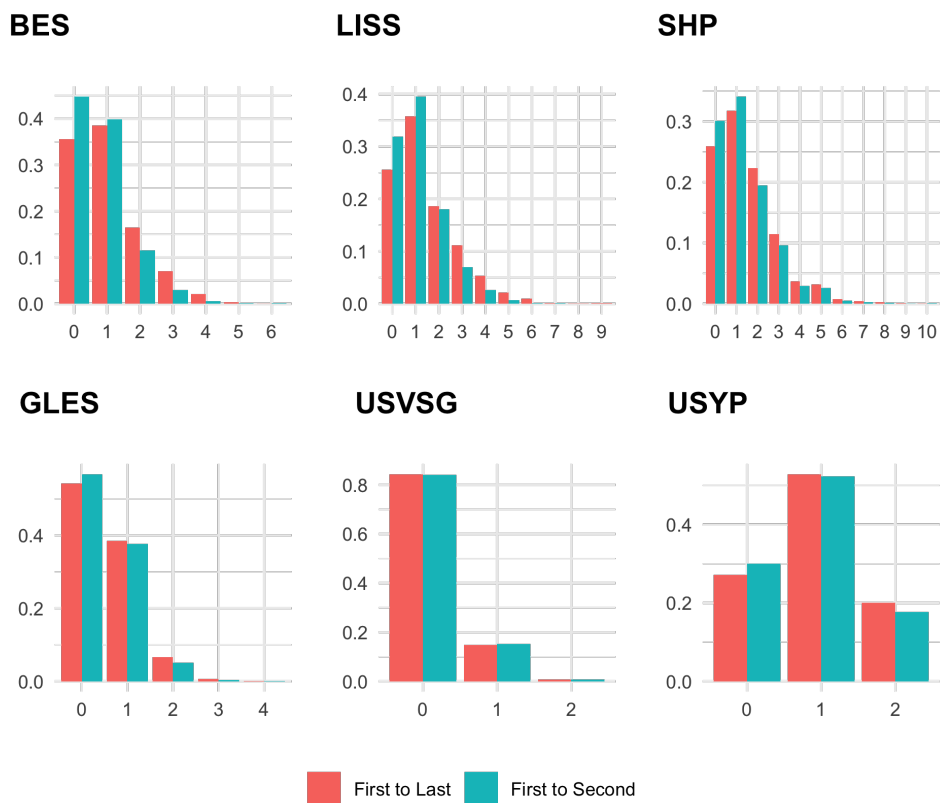


Figure 2: Mean change between first and subsequent waves in 6 panel studies, 1965 – 2020

a majority of respondents change their response by 1 category at most between the first and last waves of the panel.

In Appendix D, we also present the results of more complex latent growth models, which allows us to visualise and accommodate the (variation in) individuals’ trajectories. These models also decompose the general variation in political trust into within versus between individual variation and show that the variation within individuals is only about one third of the variation between individuals in each case. As our conclusions do not differ, we restrict the main text to the more intuitive presentations in figures 2 and 3.



Note: Number of waves/years varies between panels

Figure 3: Percentage changing categories between first and second and first and last waves for each panel

Analysis 2: Individual and contextual changes are weakly related to changes in trust

Changing individual circumstances

Whilst the descriptive analyses indicate stability, is trust responsive to changing circumstances? We first study the effect of changing *individual* circumstances; for instance, is *obtaining* a university education or becoming more politically interested related to changes in trust?⁴ Our intention here is to understand if large changes to individuals' lives are correlated with changing trust judgements, not necessarily to explain the sources of trust. If they are not, this is evidence against the malleability of trust (see O'Grady, 2019, for a similar analysis of redistribution preferences). Of course, other changes in personal circumstances may affect levels of political trust (e.g individuals' health, Mattila & Rapeli, 2018) but we are limited here by measures consistently available cross countries and over time in these data.⁵ To test this, we turn to multilevel within-between models for change. These decompose the effect of a predictor into explaining the variation in trust between individuals and the variation within individuals separately. To take into account the multilevel structure, we include random intercepts for each individual and, in the case of the SHP, for household (since respondents are sampled within households). We also include a random slope for survey wave to accommodate individuals changing differently over time. We provide more detailed discussion and defence of this modelling choice in Appendix E.

In these models, we include basic demographics - sex, age, income, education, and work status - and two attitudinal variables - political interest and self-reported left-right ideo-

⁴Note that in Appendix A.2 we provide within and between individual variation for education and income in our data, to indicate that there is variation within individuals on these predictors. For instance, in the BES, whilst the standard deviation of education is much higher between individuals (0.65), it is 0.18 within individuals. In terms of income, the within standard deviation is half that of the between standard deviation.

⁵Our variable selection does still correspond to the 'stable' end of figure 1, as they pertain to basic and relatively slow-changing demographics; variables measuring more fluctuating factors are unfortunately not consistently available in our data sets.

logy. We do not think this is an exhaustive account of what might affect trust. There are a huge range of potential individual-level causes of trust, such as (perceived) health (Mattila & Rapeli, 2018), which we do not take into account. We do think, however, that we include a range of variables that are hypothesised to have substantial effects on trust – particularly left-right ideology, education, and political interest. In summary, we claim simply that substantial changes in these variables, given their relevance, should be correlated with changes in trust levels if it were responsive to changing individual circumstances.

The results of these models are presented in figure 4. Note that sex has been removed from the plot as in our data set there is very little variation over time. All outcomes are standardised to 0-1 for comparability. The individual panel datasets are separated by columns, with the red and blue coefficients indicating between and within effects, respectively, for the variable on the Y axis.

Our core result is that the within-effects of all our included variables are either insignificant or substantively small. In the majority of cases, the between-effect is substantively larger; the exceptions are for age in Britain and being unemployed in Switzerland. Still, significant life events, such as obtaining a University education, are insignificant or only weakly related to changing levels of trust; in Britain, one may expect to become less than 2% more trusting when obtaining a University education, or 5% less trusting when becoming unemployed.

Only one within variable is consistently related to trust in significance and direction: an individuals' changing left-right ideology is positively related to trust in all countries to similar magnitudes (0.008, 0.006 and 0.003 in the BES, LISS and SHP respectively). Thus becoming more right-wing is associated with an increase in trust, but a relatively small one. Becoming more politically interested is also consistently significantly related, but with different effects in the three countries: it is negatively related in Britain, but positively in Switzerland and the Netherlands. This interesting result is likely a result of the political turmoil in Britain during the period covered.

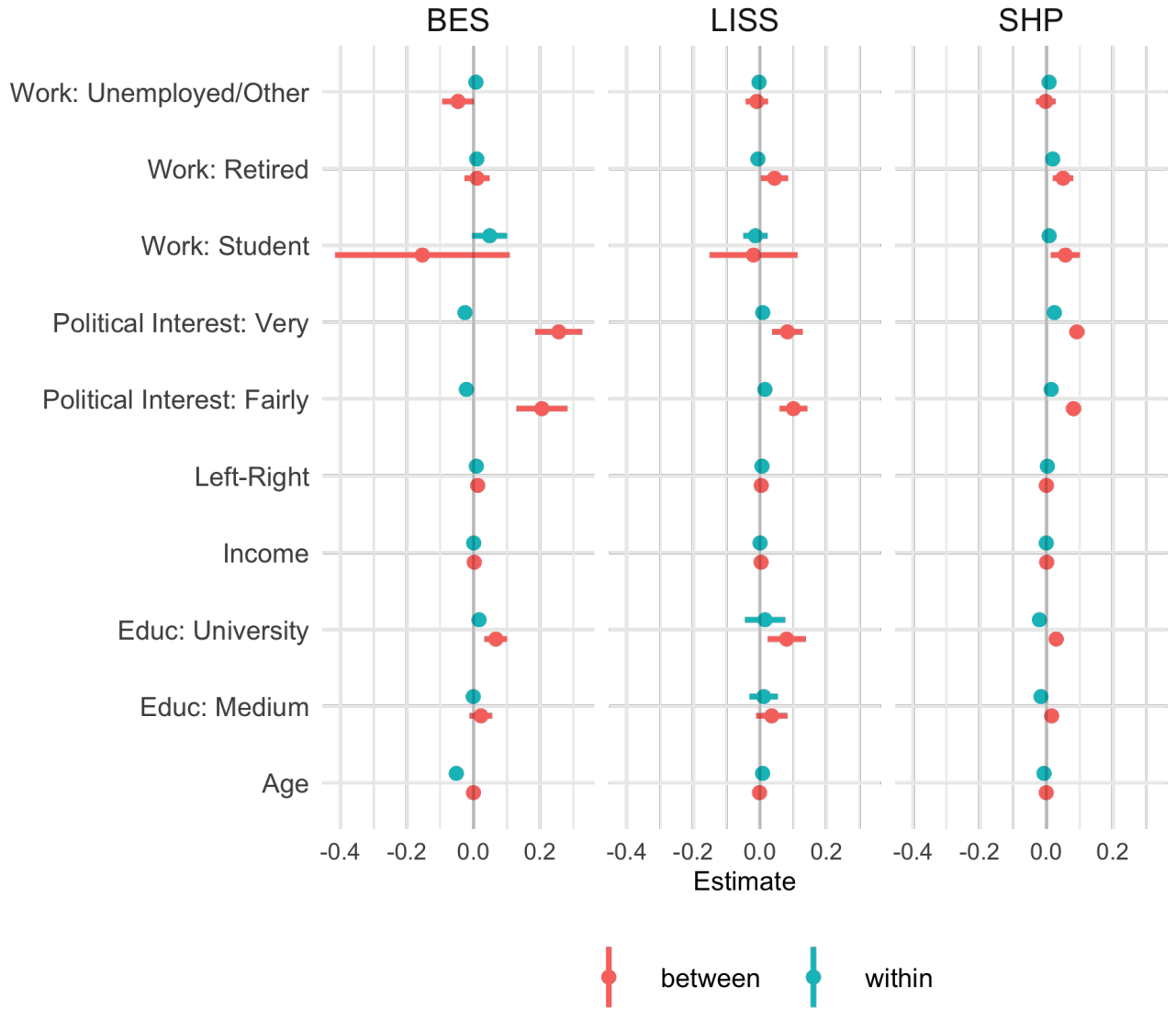


Figure 4: The within and between effects on political trust in three panel studies

Altogether, we observe that substantial changes to individuals' income, education, ideology or political interest, amongst others, result in minimal changes to their levels of political trust in these three countries. We *do*, however, observe differences between people. Our analysis here points to similar conclusions as in studies of other attitudes: specifically that differences between individuals are likely deeply rooted and relatively robust to changing individual circumstances (Margalit, 2013; O'Grady, 2019).

Changing political context

Whilst changing individual circumstances seem to be only weakly correlated with changes in political trust, it may be that trust instead responds to changing *political* contexts. As has been noted, political trust is explicitly political and should therefore respond to changing political contexts (Citrin & Stoker, 2018). Our case is the effect of incumbent government turnover. Does losing incumbency status impact political trust? We test this in the Netherlands, as this offers the biggest variation in incumbency status available in our dataset.⁶ Our independent variable indicates when respondents' preferred party leaves or enters a majority coalition government after an election, which we call 'changing incumbency status'.⁷ Elections are often followed by aggregate changes in trust, in general and conditional on winner-loser status. This is a most-likely situation in which to find substantial, sudden changes in trust.

We present the results of this impact analysis in figure 5. They show that trust is on average reduced by approximately 1 point (on an 11-point scale) when incumbency status is lost. The gain in trust from acquiring incumbency status is both of a lower magnitude and declines over time. This leads to a short 'winner-loser gap' which persists for approximately a year, before closing again, and indeed reversing for a time.

This evidence points to some short-term volatility and reactions to the changing political environment, and is consistent with the evidence on the winner-loser gap in support following elections (e.g van der Meer & Steenvoorden, 2018). Yet it also shows that these changes are still relatively small even in a most-likely situation, and appear to dissipate

⁶The executive in Switzerland operates with a grand coalition government of all parties whereas the Conservative Party has led the UK government in the entire period covered by the data. In Appendix F, we show trends in trust by Brexit identity in the UK, where supporters of 'Remain' had been considerably more trusting than supporters of 'Leave' before the 2016 Brexit referendum, but that dynamic had reversed by June 2020, with a sharp decline among both groups in the interim. Another obvious event to explore is the 2008 financial recession. The SHP is the only one of our data sets that covers a period before and after that event: there, overall trust levels did decline slightly from 5.67 (on a 0-10 scale) in 2008 to 5.40 in 2009, but they had recovered in 2011, to 5.76.

⁷Because the LISS data does not have party ID, we use recalled national vote. The data covers the general elections of 2010, 2012 and 2017, with some incumbency change following each election. Finally, to isolate the effect of the political *context*, we do not count those respondents who change their partisanship to or from an incumbent party as gaining or losing incumbency status here, only those who gained or lost it through a change in government.

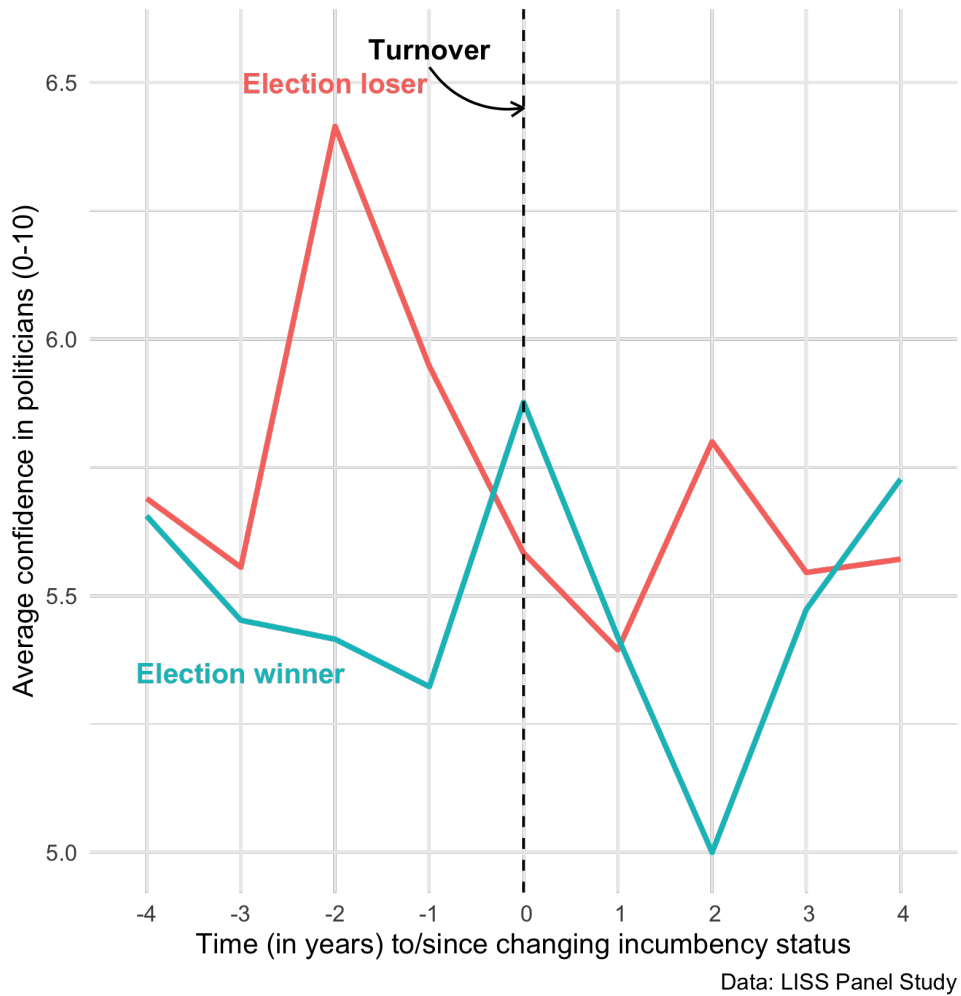


Figure 5:
Impact function of losing an election on average levels of trust

after a short time. Seen in light of our previous evidence, this is evidence of short-term volatility in the context of long-term stability. Whilst these small changes may have large political consequences, the overall variation in trust that sudden events can explain is minimal.

Discussion

Theories of political attitude formation assume some level of stability or volatility when making claims about the explanatory power of particular determinants. If one is to say that early-life socialisation is fundamental, that is to say that over the course of someone's

life we would not expect their levels of trust to change suddenly; if we believe in the potent effect of political scandal, we might expect that, on the contrary, a single event might fundamentally change someone's trust judgements. The explanatory importance we should accord to these theories thus depends on an attitude's stability: whilst scandalous political events, for instance, are important for many reasons, if they only affect attitudes temporarily, we might attach less explanatory importance to them when analysing the nature, implications and long-term dynamics of attitudes. For this reason and many others, understanding the consistency and stability of political attitudes has been a long-standing effort in political science (e.g Key, 1961; Robinson, 1964).

The stability of political trust gets to the heart of the conceptual debate about whether trust is a 'diffuse' (Easton, 1975) or 'specific' (Dalton, 2004; Norris, 2011) type of support; whether it is a deep-seated reservoir of attachment or a fleeting judgement of temporary outputs. It also helps us understand what to make of the generally low and, in many cases, declining levels of trust across most democracies. Does it signify a crisis of legitimacy for democratic systems, or a less fundamental dissatisfaction with its present outputs? Relatedly, it speaks to if, to what extent and how political trust might be rebuilt - a central policy objective of many governments and international bodies (Bouckaert, 2012; Brezzi et al., 2021; OECD, 2017).

We have furthered that understanding in this paper using six panel studies in five countries conducted between 1965 and 2020; to our knowledge, the temporally and spatially widest range of data applied to this question. We find that trust is stable in the medium-to-long term and largely unresponsive to changing individual circumstances, but somewhat responsive to changing political environments in the short-to-medium term. However, we do also find that trust appears to be much more malleable in people's formative years, evidenced by the drastically different results from the United States Youth Panel study and the greater volatility amongst young respondents in Switzerland.

What do these findings tell us about the nature of political trust and its role as an accountability mechanism in representative democracy? Our normative conclusions de-

pend on whether we see trust as evaluative or instead as a deep-seated commitment to the political system. If trust is evaluative in nature, it is concerning that trust is so stable, because that would seem to suggest that even if elected authorities do something scandalous or perform very badly, citizens might not respond by substantially altering their judgments of whether those authorities are trustworthy. Yet, our results suggest that overall, citizens do tend to adjust their trust in authorities to the political context in the short term. Perhaps such short-term adjustments are all that democracy needs for accountability: citizens may well throw the rascals out in elections after a scandal, even if their general trust judgements tend to recover in the following years. If trust is seen as a ‘diffuse’ indicator of democratic legitimacy, and if it has indeed been declining over time in many established democracies, our findings are rather troubling: they suggest that this may reflect a more fundamental decline of legitimacy than an ephemeral phase of dissatisfaction, and that rebuilding it will likely take a long time.⁸ Overall, we would suggest that trust reflects both a long-term ‘diffuse’ component of affective orientation towards the regime and a short-term ‘specific’ component of more rational evaluations of the authorities; whilst our findings show that the former dominates the latter, it does not mean that the ‘specific’, evaluative component is irrelevant, as we return to shortly. Overall, trust likely reflects both components, where its long-term trends and levels likely reflect developments in diffuse orientations, whereas short-term variations primarily reflect evaluations of contemporary authorities. The extent to which different *measures* of political trust may measure more and less diffuse components of trust would be a worthwhile topic for future research.

Whilst our findings thus contribute to our fundamental understanding of political trust - one of the attitudes most studied in political science - our contention is that they also provide a fundamental insight into the nature of political attitudes more broadly. While earlier work suggested that attitudes were not only quite malleable but potentially

⁸It is worth noting that the trust measures that we use (in line with other studies) are mostly measures of trust in politicians, government or parliament broadly speaking: it is still plausible that citizens adjust their evaluations of incumbent authorities even if their broader trust in political institutions is more stable.

meaningless (Zaller, 1992), we contribute to a spate of more recent work that suggests quite the opposite: that political attitudes are quite stable over a long period of time, and the primary determinants of individual's attitudes likely lie in either their disposition, early-life socialisation or both (Jennings et al., 2009). Indeed, our results are very similar to studies on attitudes towards immigration and redistribution (Kiley & Vaisey, 2020; Kustov et al., 2021; O'Grady, 2019). Although these attitudes are qualitatively different to political trust, each are types of political judgements made by citizens and these findings speak to how meaningful those judgements are and how they are formed. We have advanced these prior studies in terms of breadth - by including trust - but also in depth, by the range of data and empirical tests we have applied.

Although our findings suggest that trust is more stable than malleable, this does not mean that contemporary factors - like policy delivery, scandals, or elections - do not matter. Indeed, we have shown that elections *do* matter, and it might be that these relatively small changes can have large political consequences, at least in the short term. This may be the 'specific' component of trust, in which these short-term fluctuations act to reinforce democratic accountability. Short-term shocks may also be very important for shaping the long-term trust judgements of citizens in their youth at the time of those events. We have also focused on averages: factors may have different impacts on different people and may have more permanent influences on a subset of people than others, not just depending on age. For instance, while overall levels of trust may be recovering in Britain, they appear to be considerably higher among Leave supporters than before - and lower for Remainers. We don't think that these factors should be disregarded, only that their effects should be seen in the context of longer-term overall stability (see, for instance, Margalit, 2013).

We think that there is enormous potential for future research to build on this and others' studies. In our view, the first priority should be to identify the factors which determine whether an individual is likely to change their trust judgement. Figure 3 indicates that some respondents do change substantially. What determines the variation? Are those

more interested in politics more likely to alter their views, or are they more ideologically constrained? Do socially marginalized groups have less stable trust levels than others? Secondly, future work should study the longer term implications of short-term changes in trust; for instance, do small changes in political trust lead individuals to shift party allegiance, perhaps to anti-establishment parties? For now, however, this paper has provided insights into the normative standing and theoretical determinants of political trust - a quality seen as fundamental for good governance and social cooperation - with broader implications for understanding political attitude formation.

Acknowledgements

We thank Professor Laura Stoker for providing us with the Youth Panel data and for extensive comments on an earlier version. We also thank Jessica Smith, Stuart Turnbull-Dugarte, Gerry Stoker, and participants at a seminar at the University of Montreal for comments. Finally, we appreciate the time and effort the three reviewers put into helping us finalise the paper.

References

- Almond, G. & Verba, S. (1963). *The civic culture: Political attitudes and democracy in five nations*. Princeton University Press.
- Ansolabehere, S., Rodden, J. & Snyder, J. M. (2008). The strength of issues: Using multiple measures to gauge preference stability, ideological constraint, and issue voting. *American Political Science Review*, *102*(2), 215–232.
- Armingeon, K. & Guthmann, K. (2014). Democracy in crisis? the declining support for national democracy in european countries, 2007–2011. *European Journal of Political Research*, *53*(3), 423–442.
- Barton, R. & Piston, S. (2021). Undeserving rich or untrustworthy government? how elite rhetoric erodes support for soaking the rich. *Politics, Groups, and Identities*, 1–25.
- Bauer, P. C. (2018). Unemployment, trust in government, and satisfaction with democracy: An empirical investigation. *Socius*, *4*.
- Bouckaert, G. (2012). Trust and public administration. *Administration*, *60*(1), 91–115.
- Boulianne, S. (2019). Building faith in democracy: Deliberative events, political trust and efficacy. *Political Studies*, *67*(1), 4–30.
- Bowler, S. & Karp, J. A. (2004). Politicians, scandals, and trust in government. *Political Behavior*, *26*(3), 271–287.
- Brezzi, M., Gonzalez, S., Nguyen, D. & Prats, M. (2021). An updated OECD framework on drivers of trust in public institutions to meet current and future challenges. *OECD Working Papers on Public Governance*, *48*.
- Chanley, V. A., Rudolph, T. J. & Rahn, W. M. (2000). The origins and consequences of public trust in government: A time series analysis. *Public Opinion Quarterly*, *64*(3), 239–256.
- Citrin, J. & Stoker, L. (2018). Political trust in a cynical age. *Annual Review of Political Science*, *21*(1), 49–70.
- Claes, E. & Hooghe, M. (2017). The effect of political science education on political trust and interest: Results from a 5-year panel study. *Journal of Political Science Education*, *13*(1), 33–45.

- Claes, E., Hooghe, M. & Marien, S. (2012). A two-year panel study among belgian late adolescents on the impact of school environment characteristics on political trust. *International Journal of Public Opinion Research*, 24(2), 208–224.
- Converse, P. E. (1962). Information flow and the stability of partisan attitudes. *The Public Opinion Quarterly*, 26(4), 578–599.
- Converse, P. E. (1974). Comment: The status of nonattitudes. *American Political Science Review*, 68(2), 650–660.
- Converse, P. E. (2006). The nature of belief systems in mass publics (1964). *Critical Review*, 18(1), 1–74.
- Craig, S. C. & Rippere, P. S. (2014). Political trust and negative campaigns: Two tests of the figure-ground hypothesis. *Politics & Policy*, 42(5), 693–743.
- Dalton, R. J. (2004). *Democratic challenges, democratic choices: The erosion of political support in advanced industrial democracies*. Oxford University Press.
- Easton, D. (1965). *A framework for political analysis*. Prentice Hall.
- Easton, D. (1975). A re-assessment of the concept of political support. *British Journal of Political Science*, 5(4), 435–457.
- Easton, D. (1976). Theoretical approaches to political support. *Canadian Journal of Political Science / Revue canadienne de science politique*, 9(3), 431–448.
- Fairbrother, M. (2014). Two multilevel modeling techniques for analyzing comparative longitudinal survey datasets. *Political Science Research and Methods*, 2(1), 119–140.
- Foster, C. & Frieden, J. (2017). Crisis of trust: Socio-economic determinants of europeans' confidence in government. *European Union Politics*, 18(4), 511–535.
- Freitag, M. & Ackermann, K. (2016). Direct democracy and institutional trust: Relationships and differences across personality traits: Direct democracy and institutional trust. *Political Psychology*, 37(5), 707–723.
- Haugsgjerd, A. & Kumlin, S. (2020). Downbound spiral? economic grievances, perceived social protection and political distrust. *West European Politics*, 43(4), 969–990.

- Hooghe, M., Dassonneville, R. & Marien, S. (2015). The impact of education on the development of political trust: Results from a five-year panel study among late adolescents and young adults in Belgium. *Political Studies*, 63(1), 123–141.
- Inglehart, R. (1997). *Modernization and postmodernization: Cultural, economic and political change in 43 societies*. Princeton University Press.
- Intawan, C. & Nicholson, S. P. (2018). My trust in government is implicit: Automatic trust in government and system support. *The Journal of Politics*, 80(2), 601–614.
- Jennings, M. K., Stoker, L. & Bowers, J. (2009). Politics across generations: Family transmission reexamined. *The Journal of Politics*, 71(3), 782–799.
- Key, V. (1961). *Public opinion and American democracy*. Knopf.
- Kiley, K. & Vaisey, S. (2020). Measuring stability and change in personal culture using panel data. *American Sociological Review*, 85(3), 477–506.
- Krupenkin, M. (2021). Does partisanship affect compliance with government recommendations? *Political Behavior*, 43(1), 451–472.
- Kuhn, T., Lancee, B. & Sarrasin, O. (2021). Growing up as a European? Parental socialization and the educational divide in Euroskepticism. *Political Psychology*, 42(6), 957–975.
- Kustov, A., Laaker, D. & Reller, C. (2021). The stability of immigration attitudes: Evidence and implications. *Journal of Politics*, 83(4), 1478–1494.
- Langsæther, P. E., Evans, G. & O’Grady, T. (2022). Explaining the relationship between class position and political preferences: A long-term panel analysis of intra-generational class mobility. *British Journal of Political Science*, 52(2), 958–967.
- Lippmann, W. (1922). *Public opinion*. Harcourt, Brace; Co.
- Macdonald, D. (2021). Political trust and support for immigration in the American mass public. *British Journal of Political Science*, 51(4), 1402–1420.
- Maier, J. (2011). The impact of political scandals on political support: An experimental test of two theories. *International Political Science Review*, 32(3), 283–302.
- Mair, P. (1998). *Party system change: Approaches and interpretations*. Oxford University Press.

- Mair, P. (2013). *Ruling the void: The hollowing of western democracy*. Verso Books.
- Margalit, Y. (2013). Explaining social policy preferences: Evidence from the great recession. *American Political Science Review*, 107(1), 80–103.
- Marien, S. & Hooghe, M. (2011). Does political trust matter? an empirical investigation into the relation between political trust and support for law compliance. *European Journal of Political Research*, 50(2), 267–291.
- Mattila, M. & Rapeli, L. (2018). Just sick of it? health and political trust in western europe. *European Journal of Political Research*, 57(1), 116–134.
- Miller, A. H. (1974). Political issues and trust in government: 1964-1970. *The American Political Science Review*, 68(3), 951–972.
- Mishler, W. & Rose, R. (2001). What are the origins of political trust?: Testing institutional and cultural theories in post-communist societies. *Comparative Political Studies*, 34(1), 30–62.
- Newton, K. (2006). May the weak force be with you: The power of the mass media in modern politics. *European Journal of Political Research*, 45(2), 209–234.
- Norris, P. (2011). *Democratic deficit: Critical citizens revisited*. Cambridge University Press.
- OECD. (2017). *Trust and public policy: How better governance can help rebuild public trust*. Paris.
- O’Grady, T. (2019). How do economic circumstances determine preferences? evidence from long-run panel data. *British Journal of Political Science*, 49(4), 1381–1406.
- Prior, M. (2010). You’ve either got it or you don’t? the stability of political interest over the life cycle. *Journal of Politics*, 72(3), 747–766.
- Putnam, R. D. (1995). Bowling alone: America’s declining social capital. *Journal of Democracy*, 6(1), 65–78.
- Robinson, J. A. (1964). Public opinion in lasswell’s future of political science. *Public Opinion Quarterly*, 28(3), 395.
- Schoon, I. & Cheng, H. (2011). Determinants of political trust: A lifetime learning model. *Developmental Psychology*, 47(3), 619–631.

- Sikorski, C., Heiss, R. & Matthes, J. (2020). How political scandals affect the electorate. tracing the eroding and spillover effects of scandals with a panel study. *Political Psychology*, 41(3), 549–568.
- Sturgis, P., Read, S., Hatemi, P. K., Zhu, G., Trull, T., Wright, M. J. & Martin, N. G. (2010). A genetic basis for social trust? *Political Behavior*, 32(2), 205–230.
- Uslaner, E. M. (2018). The study of trust. In E. M. Uslaner (Ed.), *The oxford handbook of social and political trust* (pp. 1–12). Oxford University Press.
- Valgarðsson, V. O., Stoker, G., Devine, D., Gaskell, J. & Jennings, W. (2021). Disengagement and political trust: Divergent pathways. In M. T. Grasso & M. Giugni (Eds.), *Oxford handbook of political participation*. Oxford University Press.
- van der Meer, T. & Steenvoorden, E. H. (2018). Going back to the well: A panel study into the election boost of political support among electoral winners and losers. *Electoral Studies*, 55, 40–53.
- van der Meer, T. W. (2018). Economic performance and political trust. In E. M. Uslaner (Ed.), *The oxford handbook of social and political trust*. Oxford University Press.
- van Elsas, E. J., Brosius, A., Marquart, F. & De Vreese, C. H. (2019). How political malpractice affects trust in EU institutions. *West European Politics*, 1–25.
- van Ingen, E. & Bekkers, R. (2015). Generalized trust through civic engagement? evidence from five national panel studies: Generalized trust through civic engagement? *Political Psychology*, 36(3), 277–294.
- Zaller, J. (1992). *The nature and origins of mass opinion*. Cambridge University Press.
- Zmerli, S. & van der Meer, T. (Eds.). (2017). *Handbook on political trust*. Edward Elgar Publishing.

Appendix

Stability and Change in Political Trust

A Summary statistics (BES, LISS, SHP)	ii
A.1 Basic summary statistics	iii
A.2 Within-between variation of chosen variables	v
A.2.1 Variation in trust	v
A.2.2 Variation in explanatory variables	v
B Correlations across waves (all panels)	vi
B.1 Correlations of trust over time	vi
B.2 Correlations of political interest over time	x
B.3 Mean changes across waves for different measures of trust (LISS)	xiii
C Mean change by age in the SHP	xiv
D Latent growth models	xvi
E Robustness tests for within-between models	xviii
F Brexit effect in Britain	xxii

A Summary statistics (BES, LISS, SHP)

A.1 Basic summary statistics

Table 2: Summary statistics: BES

	Unique (#)	Missing (%)	Mean	SD	Min	Median	Max
Trust	8	38	3.0	1.5	1.0	3.0	7.0
Age	91	0	52.0	16.3	16.0	54.0	119.0
Education	4	15	2.3	0.7	1.0	2.0	3.0
Work status	5	0	2.1	1.2	1.0	1.0	4.0
Income	9	24	5.1	3.1	1.0	4.0	10.0
Left-Right	12	25	5.0	2.4	0.0	5.0	10.0
Political interest	4	22	2.3	0.7	1.0	2.0	3.0
Sex	3	0	1.5	0.5	1.0	2.0	2.0

Table 3: Summary statistics: LISS

	Unique (#)	Missing (%)	Mean	SD	Min	Median	Max
Trust	11	0	4.8	2.0	0.0	5.0	10.0
Age	87	0	49.8	17.5	16.0	51.0	102.0
Education	4	0	2.0	0.4	1.0	2.0	3.0
Work status	5	0	2.1	1.2	1.0	1.0	4.0
Income	11	41	3.7	2.6	1.0	3.0	10.0
Left-Right	12	14	5.2	2.2	0.0	5.0	10.0
Political interest	3	0	2.0	0.6	1.0	2.0	3.0
Sex	3	0	1.5	0.5	1.0	2.0	2.0

Table 4: Summary statistics: SHP

	Unique (#)	Missing (%)	Mean	SD	Min	Median	Max
Trust	12	62	5.7	2.1	0.0	6.0	10.0
Age	103	0	40.2	22.4	0.0	42.0	101.0
Education	4	7	1.9	0.8	1.0	2.0	3.0
Work status	5	22	1.9	1.0	1.0	2.0	4.0
Income	11	47	5.5	2.9	1.0	5.0	10.0
Left-Right	12	47	4.8	2.1	0.0	5.0	10.0
Political interest	4	39	2.0	0.7	1.0	2.0	3.0
Sex	2	0	1.5	0.5	1.0	2.0	2.0

A.2 Within-between variation of chosen variables

A.2.1 Variation in trust

variable	variation	mean	std	min	max	obs
LISS	overall	4.8	2.03	0.00	10.00	N = 68814
	between		1.78	0.00	10.00	n = 14239
	within		1.12	-1.80	12.40	T-bar = 7.78
BES	overall	3.03	1.53	1.00	7.00	N = 394628
	between		1.33	1.00	7.00	n = 90714
	within		0.83	-1.88	8.63	T-bar = 6.77
SHP	overall	5.7	2.15	0.00	10.00	N = 95475
	between		1.96	0.00	10.00	n = 19584
	within		1.26	-2.63	13.60	T-bar = 8.52

A.2.2 Variation in explanatory variables

variable	variation	mean	std	min	max	obs
LISS	overall	2.01	0.43	1.00	3.00	N = 68566
	between		0.44	1.00	3.00	n = 14200
	within		0.14	0.34	3.51	T-bar = 7.77
BES	overall	2.32	0.68	1.00	3.00	N = 540411
	between		0.65	1.00	3.00	n = 91314
	within		0.18	0.43	4.18	T-bar = 10.05
SHP	overall	1.95	0.76	1.00	3.00	N = 235369
	between		0.73	1.00	3.00	n = 33463
	within		0.23	0.05	3.85	T-bar = 11.83

variable	variation	mean	std	min	max	obs
LISS	overall	3.73	2.61	1.00	10.00	N = 40524
	between		1.49	1.00	9.00	n = 9308
	within		2.19	-2.27	9.43	T-bar = 7.14
BES	overall	5.09	3.07	1.00	10.00	N = 482608
	between		2.97	1.00	10.00	n = 81220
	within		1.10	-3.27	13.59	T-bar = 10.05
SHP	overall	5.49	2.88	1.00	10.00	N = 135636
	between		2.72	1.00	10.00	n = 21677
	within		1.25	-2.88	13.12	T-bar = 11.04

B Correlations across waves (all panels)

B.1 Correlations of trust over time

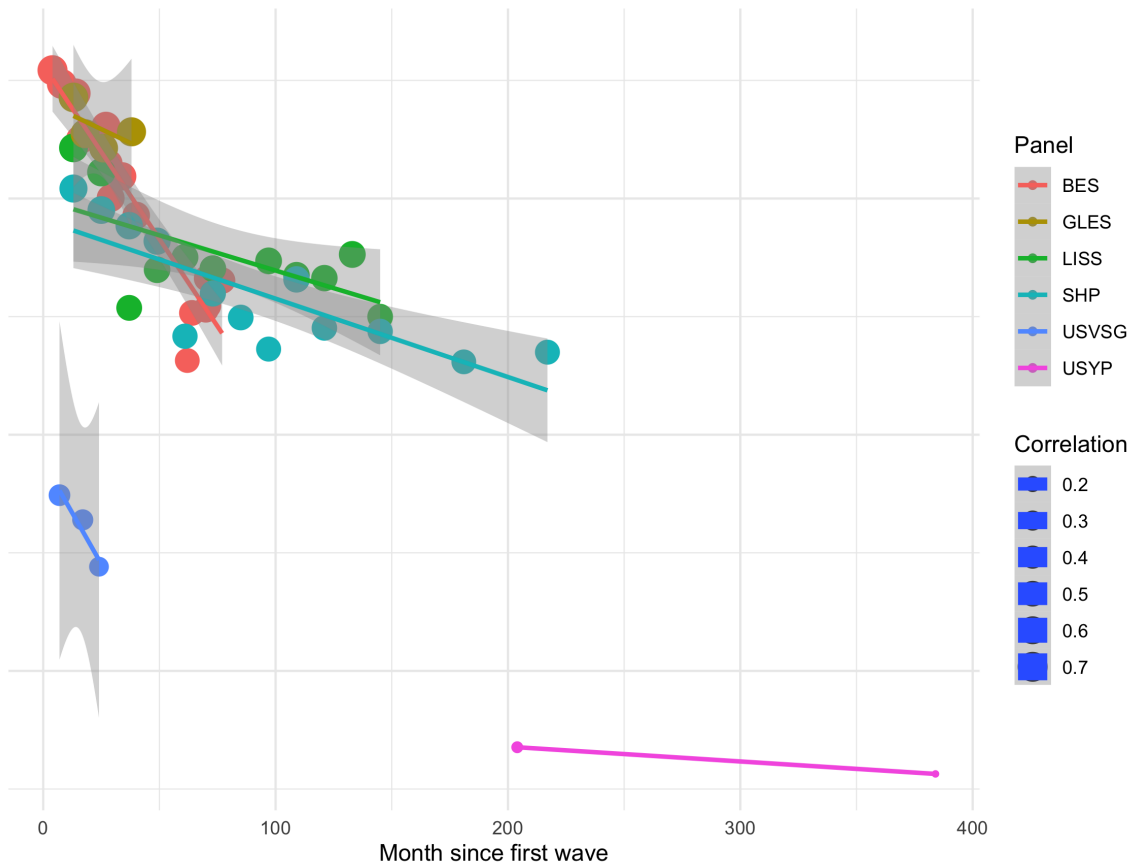


Figure 6: Correlation between first and subsequent waves in 6 panel studies, 1965 – 2020

Table 5: Correlations across waves: BES

	1	4	8	14	15	16	27	28	29	34	39	40	41	52	62
1	1.00	0.71	0.70	0.69	NA	0.65	0.66	0.63	0.60	0.62	NA	0.59	NA	NA	0.46
4	0.71	1.00	0.70	0.70	NA	0.65	0.66	0.64	0.61	0.62	NA	0.59	NA	NA	0.50
8	0.70	0.70	1.00	0.71	NA	0.66	0.67	0.62	0.62	0.63	NA	0.61	NA	NA	0.49
14	0.69	0.70	0.71	1.00	NA	0.70	0.67	0.63	0.63	0.65	NA	0.63	NA	NA	0.48
15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	0.65	0.65	0.66	0.70	NA	1.00	0.68	0.64	0.63	0.66	NA	0.65	NA	NA	0.48
27	0.66	0.66	0.67	0.67	NA	0.68	1.00	0.72	0.68	0.69	NA	0.65	NA	NA	0.57
28	0.63	0.64	0.62	0.63	NA	0.64	0.72	1.00	0.74	0.67	NA	0.59	NA	NA	0.52
29	0.60	0.61	0.62	0.63	NA	0.63	0.68	0.74	1.00	0.69	NA	0.66	NA	NA	0.55
34	0.62	0.62	0.63	0.65	NA	0.66	0.69	0.67	0.69	1.00	NA	0.71	NA	NA	0.57
39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
40	0.59	0.59	0.61	0.63	NA	0.65	0.65	0.59	0.66	0.71	NA	1.00	NA	NA	0.53
41	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62	0.46	0.50	0.49	0.48	NA	0.48	0.57	0.52	0.55	0.57	NA	0.53	NA	NA	1.00
64	0.50	0.53	0.55	0.54	NA	0.54	0.58	0.58	0.59	0.58	NA	0.57	NA	NA	0.68
70	0.51	0.51	0.51	0.51	NA	0.49	0.55	0.58	0.53	0.55	NA	0.54	NA	NA	0.62
70.5	0.53	0.56	0.54	0.56	NA	0.55	0.57	0.59	0.59	0.60	NA	0.60	NA	NA	0.63
71	0.51	0.52	0.53	0.54	NA	0.58	0.57	0.54	0.60	0.63	NA	0.63	NA	NA	0.54
77	0.53	0.52	0.53	0.54	NA	0.56	0.57	0.50	0.59	0.61	NA	0.60	NA	NA	0.51

Table 6: Correlations across waves: SHP

	1	13	25	37	49	61	73	85	97	109	121	133	145	157	169	181	193	205	217	229
1	1.00	0.61	0.59	0.58	0.56	0.48	0.52	0.50	0.47	0.53	0.49	NA	0.49	NA	NA	0.46	NA	NA	0.47	NA
13	0.61	1.00	0.64	0.61	0.58	0.54	0.56	0.54	0.49	0.54	0.51	NA	0.52	NA	NA	NA	NA	NA	0.48	NA
25	0.59	0.64	1.00	0.64	0.61	0.54	0.56	0.54	0.51	0.55	0.52	NA	0.51	NA	NA	NA	NA	NA	0.50	NA
37	0.58	0.61	0.64	1.00	0.66	0.59	0.60	0.57	0.55	0.59	0.56	NA	0.55	NA	NA	NA	NA	NA	0.51	NA
49	0.56	0.58	0.61	0.66	1.00	0.62	0.63	0.59	0.57	0.60	0.57	NA	0.56	NA	NA	NA	NA	NA	0.52	NA
61	0.48	0.54	0.54	0.59	0.62	1.00	0.64	0.62	0.59	0.55	0.55	NA	0.52	NA	NA	NA	NA	NA	0.48	NA
73	0.52	0.56	0.56	0.60	0.63	0.64	1.00	0.67	0.63	0.61	0.59	NA	0.58	NA	NA	NA	NA	NA	0.55	NA
85	0.50	0.54	0.54	0.57	0.59	0.62	0.67	1.00	0.66	0.59	0.60	NA	0.58	NA	NA	NA	NA	NA	0.57	NA
97	0.47	0.49	0.51	0.55	0.57	0.59	0.63	0.66	1.00	0.61	0.59	NA	0.57	NA	NA	NA	NA	NA	0.60	NA
109	0.53	0.54	0.55	0.59	0.60	0.55	0.61	0.59	0.61	1.00	0.66	NA	0.62	NA	NA	NA	NA	NA	0.56	NA
121	0.49	0.51	0.52	0.56	0.57	0.55	0.59	0.60	0.59	0.66	1.00	NA	0.65	NA	NA	NA	NA	NA	0.57	NA
133	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.61	NA
145	0.49	0.52	0.51	0.55	0.56	0.52	0.58	0.58	0.57	0.62	0.65	NA	1.00	NA	NA	NA	NA	NA	0.62	NA
157	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.65	NA
169	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.62	NA
181	0.46	0.49	0.49	0.53	0.54	0.51	0.56	0.54	0.53	0.60	0.61	NA	0.65	NA	NA	NA	NA	NA	0.75	NA
193	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.77	NA
205	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.77	NA
217	0.47	0.48	0.50	0.51	0.52	0.48	0.55	0.52	0.52	0.56	0.57	NA	0.62	NA	NA	NA	NA	NA	0.75	NA
229	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.80	NA

Table 7: Correlations across waves: LISS

	1	13	25	37	49	61	73	97	109	121	133	145
1	1.00	0.66	0.65	0.53	0.55	0.59	0.57	0.56	0.57	0.56	0.58	0.52
13	0.66	1.00	0.71	0.59	0.57	0.60	0.58	0.60	0.59	0.58	0.60	0.57
25	0.65	0.71	1.00	0.60	0.61	0.65	0.64	0.65	0.64	0.61	0.64	0.59
37	0.53	0.59	0.60	1.00	0.66	0.58	0.59	0.58	0.57	0.58	0.59	0.52
49	0.55	0.57	0.61	0.66	1.00	0.64	0.67	0.64	0.64	0.64	0.66	0.61
61	0.59	0.60	0.65	0.58	0.64	1.00	0.75	0.71	0.71	0.69	0.70	0.65
73	0.57	0.58	0.64	0.59	0.67	0.75	1.00	0.77	0.74	0.73	0.72	0.69
97	0.56	0.60	0.65	0.58	0.64	0.71	0.77	1.00	0.77	0.75	0.75	0.73
109	0.57	0.59	0.64	0.57	0.64	0.71	0.74	0.77	1.00	0.76	0.76	0.75
121	0.56	0.58	0.61	0.58	0.64	0.69	0.73	0.75	0.76	1.00	0.80	0.76
133	0.58	0.60	0.64	0.59	0.66	0.70	0.72	0.75	0.76	0.80	1.00	0.80
145	0.52	0.57	0.59	0.52	0.61	0.65	0.69	0.73	0.75	0.76	0.80	1.00

Table 8: Correlations across waves: GLES

	1	5	8	10	10.5	11	12	12.5	13	18	26	32	38	43	48
1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	NA	1.00	NA	NA	NA	NA	NA	NA	0.70	0.68	0.66	NA	0.68	NA	NA
8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10.5	NA	NA	NA	NA	1.00	NA	NA	NA	0.69	0.65	0.64	NA	0.66	NA	NA
11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	NA	0.70	NA	NA	0.69	NA	NA	NA	1.00	0.70	0.70	NA	0.70	NA	NA
18	NA	0.68	NA	NA	0.65	NA	NA	NA	0.70	1.00	0.69	NA	0.70	NA	NA
26	NA	0.66	NA	NA	0.64	NA	NA	NA	0.70	0.69	1.00	NA	0.72	NA	NA
32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
38	NA	0.68	NA	NA	0.66	NA	NA	NA	0.70	0.70	0.72	NA	1.00	NA	NA
43	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 9: Correlations across waves: USVSG

	trustgovt_2016	trustgovt_2017	trustgovt_2018	trustgovt_2019
trustgovt_2016	1.00	0.35	0.33	0.29
trustgovt_2017	0.35	1.00	0.45	0.43
trustgovt_2018	0.33	0.45	1.00	0.48
trustgovt_2019	0.29	0.43	0.48	1.00

Table 10: Correlations across waves: USYP

	trust65	trust82	trust97
trust65	1.00	0.14	0.11
trust82	0.14	1.00	0.25
trust97	0.11	0.25	1.00

B.2 Correlations of political interest over time

Table 11: Political interest correlations across waves: LISS

	1	13	25	37	49	61	73	97	109	121	133	145
1	1.00	0.62	0.61	0.60	0.58	0.57	0.57	0.58	0.57	0.57	0.57	0.53
13	0.62	1.00	0.64	0.64	0.61	0.59	0.59	0.58	0.59	0.57	0.56	0.53
25	0.61	0.64	1.00	0.65	0.64	0.62	0.62	0.59	0.62	0.60	0.59	0.54
37	0.60	0.64	0.65	1.00	0.69	0.66	0.66	0.64	0.65	0.64	0.62	0.58
49	0.58	0.61	0.64	0.69	1.00	0.68	0.66	0.63	0.63	0.65	0.59	0.58
61	0.57	0.59	0.62	0.66	0.68	1.00	0.68	0.64	0.65	0.65	0.61	0.58
73	0.57	0.59	0.62	0.66	0.66	0.68	1.00	0.65	0.66	0.66	0.62	0.59
97	0.58	0.58	0.59	0.64	0.63	0.64	0.65	1.00	0.66	0.67	0.65	0.62
109	0.57	0.59	0.62	0.65	0.63	0.65	0.66	0.66	1.00	0.70	0.66	0.63
121	0.57	0.57	0.60	0.64	0.65	0.65	0.66	0.67	0.70	1.00	0.69	0.64
133	0.57	0.56	0.59	0.62	0.59	0.61	0.62	0.65	0.66	0.69	1.00	0.65
145	0.53	0.53	0.54	0.58	0.58	0.58	0.59	0.62	0.63	0.64	0.65	1.00

Table 12: Political interest correlations across waves: BES

	1	4	8	14	15	16	27	28	29	34	39	40	41	52	62	64	70	70.5	71	77
1	1.00	0.72	0.72	0.69	NA	0.67	0.67	0.66	NA	0.66	0.65	NA	0.64	0.64	0.61	0.62	0.61	NA	0.62	0.61
4	0.72	1.00	0.74	0.71	NA	0.70	0.69	0.68	NA	0.68	0.67	NA	0.66	0.65	0.63	0.64	0.62	NA	0.63	0.62
8	0.72	0.74	1.00	0.71	NA	0.71	0.70	0.69	NA	0.68	0.67	NA	0.66	0.66	0.63	0.65	0.62	NA	0.65	0.62
14	0.69	0.71	0.71	1.00	NA	0.71	0.70	0.69	NA	0.69	0.69	NA	0.67	0.67	0.64	0.64	0.63	NA	0.65	0.62
15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	0.67	0.70	0.71	0.71	NA	1.00	0.70	0.70	NA	0.69	0.70	NA	0.70	0.68	0.65	0.66	0.65	NA	0.67	0.63
27	0.67	0.69	0.70	0.70	NA	0.70	1.00	0.76	NA	0.72	0.72	NA	0.70	0.69	0.67	0.69	0.66	NA	0.68	0.64
28	0.66	0.68	0.69	0.69	NA	0.70	0.76	1.00	NA	0.73	0.73	NA	0.72	0.70	0.68	0.68	0.67	NA	0.69	0.64
29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
34	0.66	0.68	0.68	0.69	NA	0.69	0.72	0.73	NA	1.00	0.75	NA	0.72	0.71	0.68	0.69	0.68	NA	0.69	0.65
39	0.65	0.67	0.67	0.69	NA	0.70	0.72	0.73	NA	0.75	1.00	NA	0.75	0.72	0.70	0.70	0.71	NA	0.71	0.68
40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
41	0.64	0.66	0.66	0.67	NA	0.70	0.70	0.72	NA	0.72	0.75	NA	1.00	0.72	0.70	0.70	0.70	NA	0.73	0.68
52	0.64	0.65	0.66	0.67	NA	0.68	0.69	0.70	NA	0.71	0.72	NA	0.72	1.00	0.72	0.72	0.70	NA	0.72	0.69
62	0.61	0.63	0.63	0.64	NA	0.65	0.67	0.68	NA	0.68	0.70	NA	0.70	0.72	1.00	0.75	0.73	NA	0.73	0.71
64	0.62	0.64	0.65	0.64	NA	0.66	0.69	0.68	NA	0.69	0.70	NA	0.70	0.72	0.75	1.00	0.72	NA	0.74	0.71
70	0.61	0.62	0.62	0.63	NA	0.65	0.66	0.67	NA	0.68	0.71	NA	0.70	0.70	0.73	0.72	1.00	NA	0.75	0.71
70.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
71	0.62	0.63	0.65	0.65	NA	0.67	0.68	0.69	NA	0.69	0.71	NA	0.73	0.72	0.73	0.74	0.75	NA	1.00	0.73
77	0.61	0.62	0.62	0.62	NA	0.63	0.64	0.64	NA	0.65	0.68	NA	0.68	0.69	0.71	0.71	0.71	NA	0.73	1.00

Table 13: Political interest correlations across waves: SHP

	1	13	25	37	49	61	73	85	97	109	121	133	145	157	169	181	193	205	217	229
1	1.00	0.68	0.65	0.66	0.64	0.63	0.61	0.63	0.61	0.61	0.59	0.61	0.62	0.60	0.60	0.60	0.58	0.59	0.60	0.57
13	0.68	1.00	0.68	0.67	0.66	0.64	0.63	0.63	0.63	0.62	0.60	0.59	0.60	0.59	0.60	0.60	0.60	0.59	0.59	0.57
25	0.65	0.68	1.00	0.68	0.68	0.64	0.63	0.64	0.62	0.61	0.61	0.60	0.59	0.58	0.59	0.58	0.59	0.59	0.58	0.57
37	0.66	0.67	0.68	1.00	0.70	0.68	0.66	0.66	0.65	0.62	0.62	0.63	0.61	0.61	0.60	0.61	0.61	0.61	0.61	0.58
49	0.64	0.66	0.68	0.70	1.00	0.70	0.67	0.69	0.67	0.65	0.66	0.65	0.65	0.64	0.64	0.64	0.63	0.64	0.63	0.60
61	0.63	0.64	0.64	0.68	0.70	1.00	0.71	0.70	0.67	0.66	0.65	0.65	0.64	0.62	0.62	0.62	0.63	0.62	0.62	0.61
73	0.61	0.63	0.63	0.66	0.67	0.71	1.00	0.72	0.68	0.67	0.65	0.65	0.65	0.64	0.63	0.63	0.63	0.63	0.62	0.62
85	0.63	0.63	0.64	0.66	0.69	0.70	0.72	1.00	0.72	0.69	0.68	0.67	0.67	0.66	0.66	0.64	0.66	0.65	0.64	0.63
97	0.61	0.63	0.62	0.65	0.67	0.67	0.68	0.72	1.00	0.70	0.68	0.68	0.68	0.67	0.67	0.66	0.66	0.65	0.65	0.63
109	0.61	0.62	0.61	0.62	0.65	0.66	0.67	0.69	0.70	1.00	0.71	0.69	0.68	0.67	0.67	0.66	0.66	0.67	0.65	0.64
121	0.59	0.60	0.61	0.62	0.66	0.65	0.65	0.68	0.68	0.71	1.00	0.72	0.71	0.70	0.69	0.68	0.68	0.68	0.66	0.65
133	0.61	0.59	0.60	0.63	0.65	0.65	0.65	0.67	0.68	0.69	0.72	1.00	0.72	0.71	0.71	0.69	0.69	0.70	0.69	0.69
145	0.62	0.60	0.59	0.61	0.65	0.64	0.65	0.67	0.68	0.68	0.71	0.72	1.00	0.74	0.73	0.73	0.70	0.70	0.70	0.69
157	0.60	0.59	0.58	0.61	0.64	0.62	0.64	0.66	0.67	0.67	0.70	0.71	0.74	1.00	0.75	0.72	0.72	0.73	0.70	0.71
169	0.60	0.60	0.59	0.60	0.64	0.62	0.63	0.66	0.67	0.67	0.69	0.71	0.73	0.75	1.00	0.75	0.74	0.73	0.72	0.71
181	0.60	0.60	0.58	0.61	0.64	0.62	0.63	0.64	0.66	0.66	0.68	0.69	0.73	0.72	0.75	1.00	0.72	0.72	0.72	0.71
193	0.58	0.60	0.59	0.61	0.63	0.63	0.63	0.66	0.66	0.66	0.68	0.69	0.70	0.72	0.74	0.72	1.00	0.75	0.72	0.73
205	0.59	0.59	0.59	0.61	0.64	0.62	0.63	0.65	0.65	0.67	0.68	0.70	0.70	0.73	0.73	0.72	0.75	1.00	0.74	0.74
217	0.60	0.59	0.58	0.61	0.63	0.62	0.62	0.64	0.65	0.65	0.66	0.69	0.70	0.70	0.72	0.72	0.72	0.74	1.00	0.75
229	0.57	0.57	0.57	0.58	0.60	0.61	0.62	0.63	0.63	0.64	0.65	0.69	0.69	0.71	0.71	0.71	0.73	0.74	0.75	1.00

B.3 Mean changes across waves for different measures of trust (LISS)

Figure 7 shows mean absolute changes in trust responses across waves for five different measures of trust. Whilst trust in government changes slightly more in the first part of the period, the difference is small and dissipates over time. Similarly, trust in parliament is perhaps most stable overall whereas trust in the European Parliament is overall least stable, but the differences are of a magnitude of only about 0.02 (representing a mean change of about 0.2 on the original 0-10 scale). This supports the idea of relative stability, even across trust objects, although

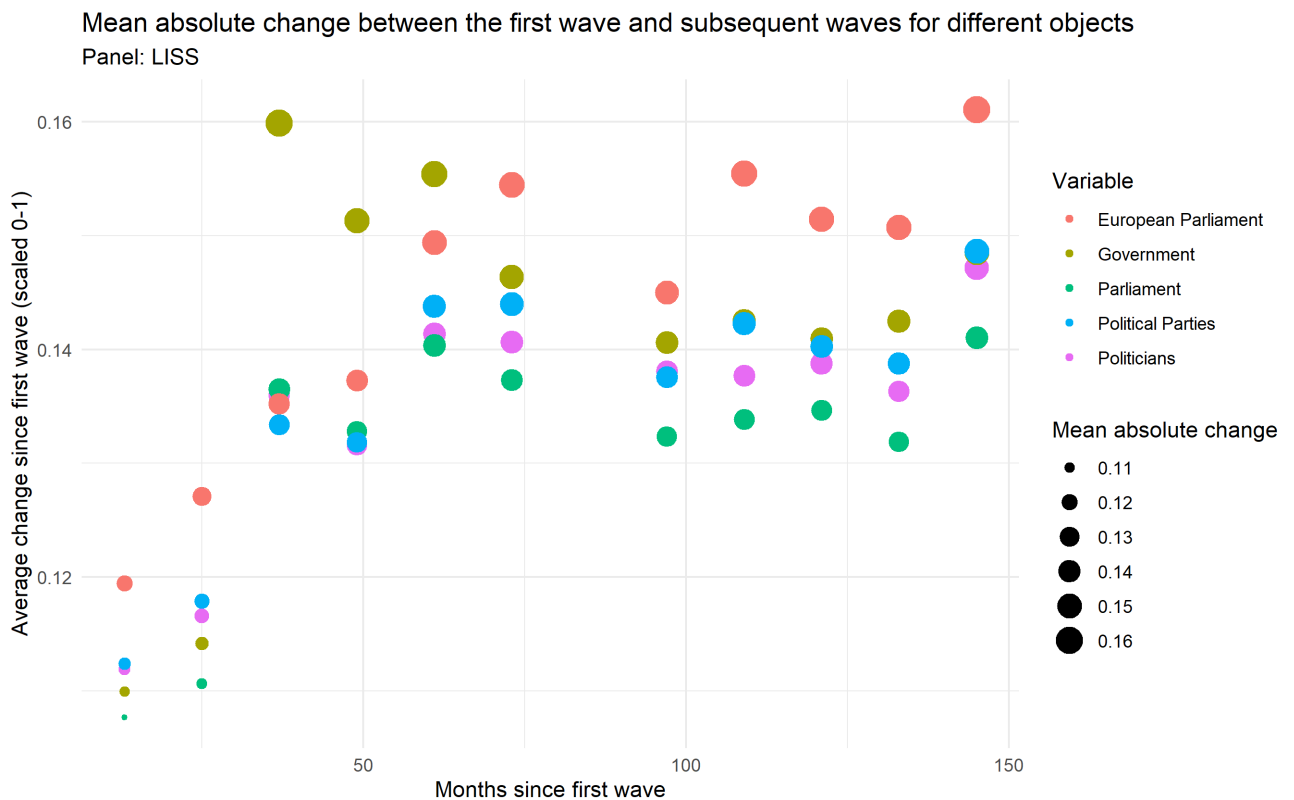


Figure 7: Mean change between first and subsequent waves for different confidence variables in LISS

C Mean change by age in the SHP

In the main analysis, we saw that the US Youth Panel was an outlier (figures 2 and 3). We suggested this was likely primarily due to the first wave being conducted amongst teenagers and those attitudes are less stable than amongst adults. To explore this, we repeated the mean change analysis separating by age at the first wave in the SHP (Switzerland). We chose the SHP because it is the longest panel that also interviewed teenagers.

The results are in figure 8. This shows three comparisons: between those under and over 16, under and over 20, and under and over 25. What we see is far more volatility, increasing over time, when the respondent was interviewed in their youth, and this is particularly large for those under 16.

These results give us confidence that the volatility in the USYP is likely due to the age of inclusion, even if that is exacerbated by the genuine collapse in trust in the US from the 1960s. More importantly, this provides strong evidence in favour of the socialisation effect for trust formation.

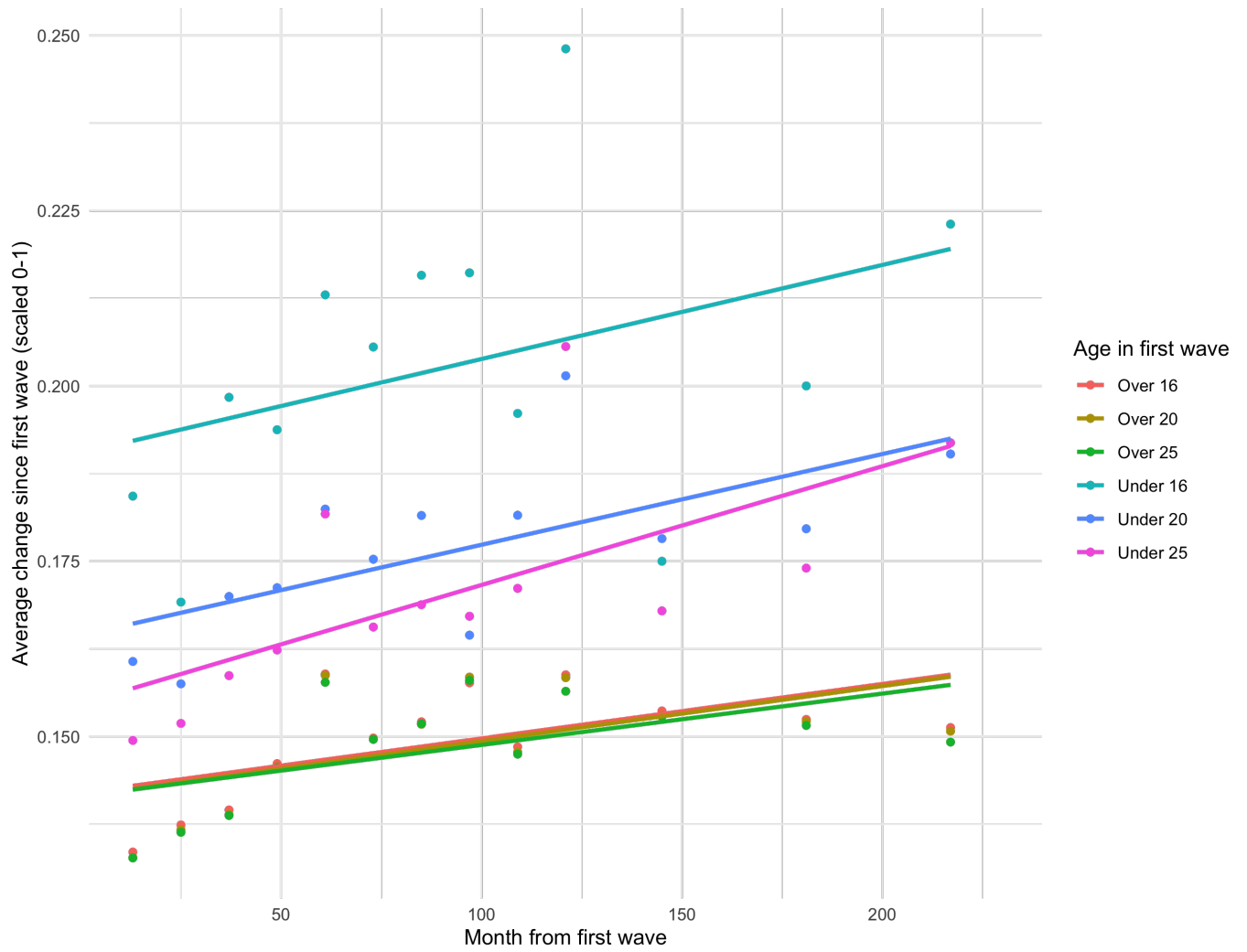


Figure 8: Mean change over time by age in first survey (SHP)

D Latent growth models

Latent growth models (LGMs) allow us to parsimoniously quantify how much trust changes for each individual over time and compare it with variation between individuals. Given the requirement of relatively long panels, both in time and number of waves, we restrict this analysis to the LISS, BES and SHP panels.

As an indication of the variation between and within individuals within these panels, we decompose the variance into overall, between and within variation in table 14. There is greater variation between individuals than within them; around one third higher in each case.

Table 14: Decomposed variation of trust variables in three panels

panel	variation	mean	std	min	max	obs
LISS	overall	4.8	2.03	0.00	10.00	N = 68814
	between		1.78	0.00	10.00	n = 14239
	within		1.12	-1.80	12.40	T-bar = 7.78
BES	overall	3.03	1.53	1.00	7.00	N = 394628
	between		1.33	1.00	7.00	n = 90714
	within		0.83	-1.88	8.63	T-bar = 6.77
SHP	overall	5.7	2.15	0.00	10.00	N = 95475
	between		1.96	0.00	10.00	n = 19584
	within		1.26	-2.63	13.60	T-bar = 8.52

We present the relevant results of the latent growth models in figure 9. This figure shows the change in trust for all individuals in each sample in grey, with the red line indicating the mean change. Along the X axis is the number of waves, and on the Y axis the levels of trust on their respective original scales. Note that for the BES, we have kept only 10 waves as few respondents completed all waves, and the observations drop substantially after 10 completed waves.

Within all three countries, individuals *change* at similar rates. The variation in the rates of change is low (between 0.005 and 0.014), albeit statistically significant. However, individuals have very different *starting points*: the variation here is between 1.8 and 2.4. Individuals differ remarkably in their baseline levels of trust, but change minimally and

very similarly over time.

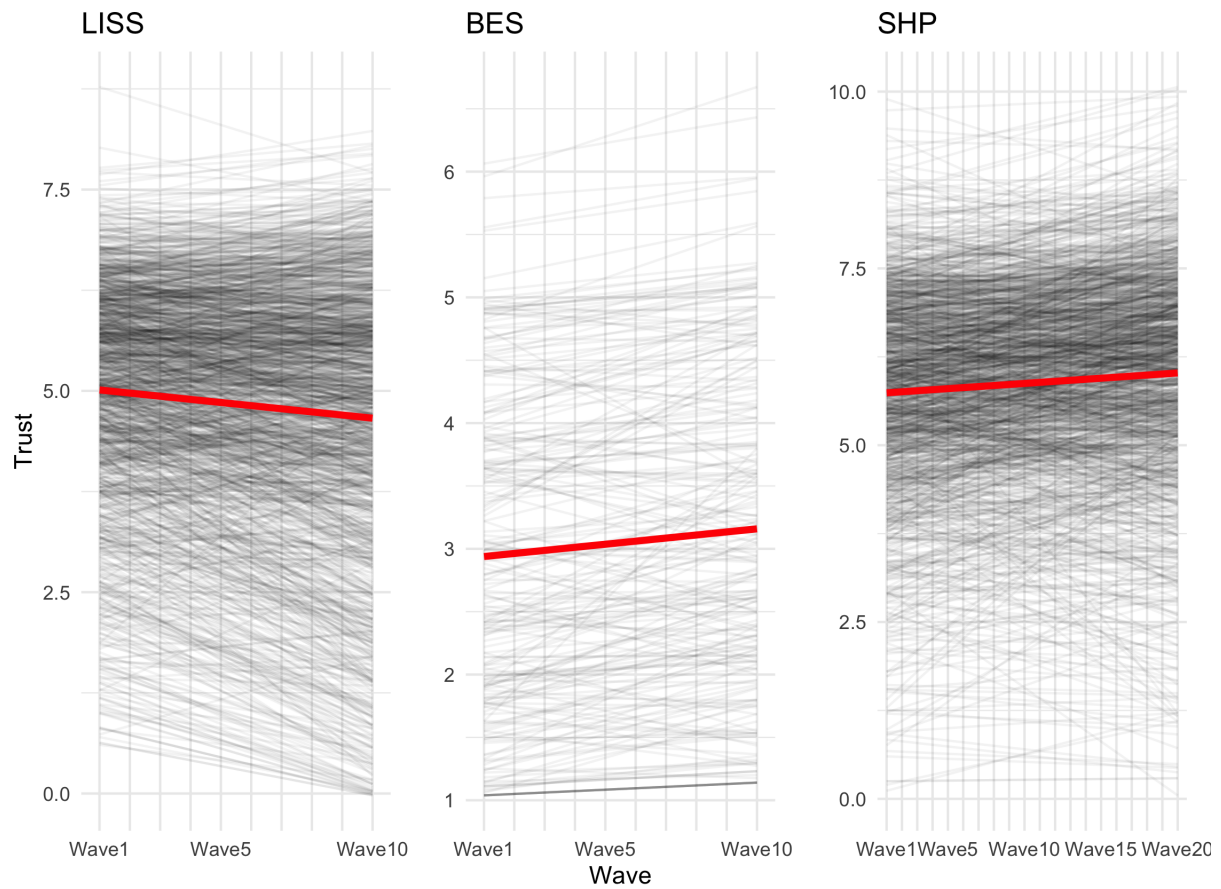


Figure 9: The rate of change in three panel studies

Over time, individuals are likely to provide consistent answers to questions about how much they trust political institutions or actors. Even over very long periods of time, people are likely to provide much the same answer today as they did when they were first asked long ago. Moreover, there is minimal variation in individuals' rates of change, suggesting that most people change in similar ways. Overall, whilst there are clearly those who *do* change trust judgements substantially, the majority of respondents display consistent and stable responses.

E Robustness tests for within-between models

Alternative models

Table 15 presents models pooling the within-between effects with standard errors clustered by individual (and household for the SHP) and with fixed effects (for individual and individual and house for the SHP). There are multiple potential reasons why the fixed effects differ from those that are presented. The ones presented had random instead of fixed effects and, importantly, take into account individuals changing differently over time (i.e., a random slope on time). In addition, the below models do not include wave (time) as a fixed effect, but as standard errors. Still, the results do not substantially alter our conclusions. For instance, gaining University education in the BES is associated with a 0.043 increase on a 0-1 scale, or 4%; the coefficient for the pooled model is 0.07 (7%), which is similar to the between-effect in the models presented in the main text. As such, our broader conclusions remain even if the point estimate changes between estimation strategies.

Table 16 presents results from models with a random slope for time (Cols 1-3) and those without (4-6). Cols 1-3 are the ones that are presented in the main text. ANOVA tests (included in the replication code) indicate that the simpler models are a better fit, however, for theoretical reasons (i.e., we do expect that individuals change differently over time, particularly given the LGM results) we keep the more complex models. That said, table 16 indicates our results do not change if we opt for the simpler model. The only result that changes meaningfully is the coefficient for ‘University: Within’ in the BES, which is significant and slightly stronger ($p = 0.1$, $\beta = 0.017$, rather than 0.014) in the simpler model. However, this change in coefficient is minimal and at a weak level of significance. All other results are consistent.

Table 15: Pooled and fixed-effects OLS models predicting political trust

	Political trust					
	LISS	SHP	BES	LISS (FEs)	SHP (FEs)	BES (FEs)
	(1)	(2)	(3)	(4)	(5)	(6)
Age	-0.001*	-0.00005	-0.0003	-0.004***	0.001	-0.009*
	(0.001)	(0.0004)	(0.001)	(0.001)	(0.002)	(0.005)
Education: Medium	0.026	0.017*	0.027	0.008	-0.019***	0.016
	(0.022)	(0.009)	(0.019)	(0.020)	(0.007)	(0.015)
Education: University	0.088***	0.029***	0.072***	0.017	-0.027***	0.043**
	(0.028)	(0.010)	(0.021)	(0.019)	(0.008)	(0.019)
Work status: Student	-0.008	0.050***	-0.016	-0.0002	0.018**	0.019
	(0.020)	(0.014)	(0.053)	(0.015)	(0.009)	(0.028)
Work status: Retired	0.028**	0.037***	0.003	0.001	0.018***	0.006
	(0.014)	(0.009)	(0.014)	(0.007)	(0.003)	(0.009)
Work status: Unemployed/Other	-0.012	-0.003	-0.031*	0.001	0.008**	-0.001
	(0.014)	(0.009)	(0.016)	(0.008)	(0.004)	(0.012)
Income	-0.001	0.001	0.001	0.001	0.0002	-0.001
	(0.001)	(0.001)	(0.002)	(0.0005)	(0.001)	(0.001)
Left right	0.002	0.001	0.012***	0.005***	0.003***	0.009***
	(0.003)	(0.002)	(0.003)	(0.002)	(0.001)	(0.003)
Political interest: Fairly interested	0.053***	0.041***	0.126***	0.018***	0.017***	0.042***
	(0.012)	(0.007)	(0.023)	(0.004)	(0.004)	(0.012)
Political interest: Very interested	0.039**	0.056***	0.152***	0.009	0.028***	0.044***
	(0.016)	(0.010)	(0.024)	(0.007)	(0.006)	(0.013)
Female	0.021*	0.005	0.038***			
	(0.011)	(0.007)	(0.013)			
Constant	0.433***	0.502***	0.064			
	(0.044)	(0.029)	(0.050)			
Observations	9,733	30,931	8,426	9,733	30,931	8,426
R ²	0.023	0.017	0.049	0.687	0.618	0.634

Note:

*p<0.1; **p<0.05; ***p<0.01
 Cols 1-3, Standard errors clustered by individual and wave; Cols 4-6 fixed effects

Table 16: Comparing models with a random slope for time and without

	Political trust					
	LISS	SHP	BES	LISS	SHP	BES
	(1)	(2)	(3)	(4)	(5)	(6)
Age: Within	0.008*	-0.007**	-0.052***	0.008*	-0.006*	-0.049***
	(0.004)	(0.003)	(0.004)	(0.005)	(0.003)	(0.004)
Age: Between	-0.001*	-0.0004	-0.0001	-0.001	-0.0004	-0.0001
	(0.001)	(0.0004)	(0.001)	(0.001)	(0.0004)	(0.001)
Income: Within	0.0004	-0.0002	0.001	0.001	0.0002	0.0002
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Income: Between	0.003	0.001	0.002	0.003	0.001	0.002
	(0.005)	(0.002)	(0.003)	(0.005)	(0.002)	(0.003)
Medium Educ: Within	0.011	-0.016**	-0.001	0.011	-0.013*	-0.003
	(0.022)	(0.008)	(0.008)	(0.020)	(0.008)	(0.008)
Medium Educ: Between	0.035	0.016*	0.022	0.041*	0.016*	0.022
	(0.024)	(0.009)	(0.017)	(0.025)	(0.009)	(0.017)
University: Within	0.015	-0.021**	0.017*	0.022	-0.017*	0.014
	(0.031)	(0.010)	(0.010)	(0.027)	(0.009)	(0.009)
University: Between	0.080***	0.029***	0.067***	0.100***	0.030***	0.065***
	(0.029)	(0.010)	(0.018)	(0.030)	(0.010)	(0.018)
Student: Within	-0.014	0.008	0.049*	-0.004	0.008	0.055**
	(0.019)	(0.008)	(0.027)	(0.017)	(0.008)	(0.025)
Student: Between	-0.019	0.057**	-0.154	-0.001	0.058***	-0.151
	(0.068)	(0.023)	(0.134)	(0.069)	(0.022)	(0.134)
Retired; Within	-0.006	0.019***	0.010	0.001	0.018***	0.010
	(0.008)	(0.004)	(0.009)	(0.007)	(0.004)	(0.008)
Retired: Between	0.044**	0.050***	0.011	0.037*	0.049***	0.010
	(0.021)	(0.016)	(0.019)	(0.021)	(0.016)	(0.019)
Unemployed; Within	-0.003	0.008**	0.007	0.0004	0.007*	0.005
	(0.007)	(0.004)	(0.009)	(0.007)	(0.004)	(0.009)
Unemployed: Between	-0.009	-0.002	-0.047*	-0.017	-0.001	-0.049**
	(0.017)	(0.015)	(0.025)	(0.018)	(0.015)	(0.024)
Left-right: Within	0.006***	0.003***	0.008***	0.005***	0.003***	0.008***
	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)
Left-right: Between	0.004	0.0001	0.013***	0.002	0.0002	0.013***
	(0.003)	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)
Fairly interested: Within	0.015***	0.015***	-0.021***	0.018***	0.016***	-0.020***
	(0.006)	(0.003)	(0.004)	(0.006)	(0.003)	(0.005)
Fairly Interested: Between	0.101***	0.082***	0.205***	0.101***	0.081***	0.208***
	(0.021)	(0.012)	(0.039)	(0.022)	(0.012)	(0.039)
Very interested: Within	0.008	0.024***	-0.026***	0.009	0.027***	-0.027***
	(0.007)	(0.004)	(0.004)	(0.007)	(0.004)	(0.004)
Very Interested: Between	0.083***	0.092***	0.256***	0.079***	0.092***	0.257***
	(0.024)	(0.012)	(0.036)	(0.024)	(0.012)	(0.036)
Sex	0.020*	0.010	0.030**	0.026**	0.010	0.030**
	(0.011)	(0.007)	(0.013)	(0.011)	(0.007)	(0.013)
Wave	-0.013***	0.008**	0.015***	-0.013***	0.007**	0.014***
	(0.005)	(0.003)	(0.001)	(0.005)	(0.003)	(0.001)
Constant	0.450***	0.414***	-0.132**	0.435***	0.421***	-0.123**
	(0.062)	(0.039)	(0.056)	(0.064)	(0.039)	(0.055)
Observations	9,736	30,938	12,087	9,736	30,938	12,087

Note:

*p<0.1; **p<0.05; ***p<0.01
 Cols 1-3, with time slope; Cols 4-6 without time slope

Model convergence

These complex models often pose convergence problems. This is the case for these models. To check that this does not pose issues for the results, the replication code checks for i) singularity ii) gradient and iii) variation across optimisers. There are no concerns raised by these robustness tests, and across most optimisers, convergence is achieved with identical results.

F Brexit effect in Britain

Britain shows the most volatility of our three core panels, so we turn our focus to that case in figure 10. We separate the sample by reported (intended and recalled) ‘Leave’ and ‘Remain’ vote in the 2016 Brexit referendum, a principle if not fundamental divide in Britain during this period. We overlay three key events: the referendum, the 2017 General Election, and the 2019 General Election. Unfortunately, there is a gap in the time series where trust was not asked. Still, we can see that there is considerable volatility and change: the average trust levels of Leave voters increased approximately 2 points, from 1.25 to 3.25, between just 4 waves (March 2019 to December 2019). This period was marked by the failure of the Government’s European Union withdrawal bill in Parliament in March 2019, Boris Johnson’s Conservative Party’s election victory in December, and the guarantee of leaving the EU in the following January, followed by the onset of the Covid-19 pandemic. This indicates that political trust has responded to the political turmoil of this period in Britain, but it remains to be seen how permanent those effects may be - indeed, despite these group differences, the average trust levels at the beginning and end of the period are not dissimilar (around 3.1 and 3.0, respectively).

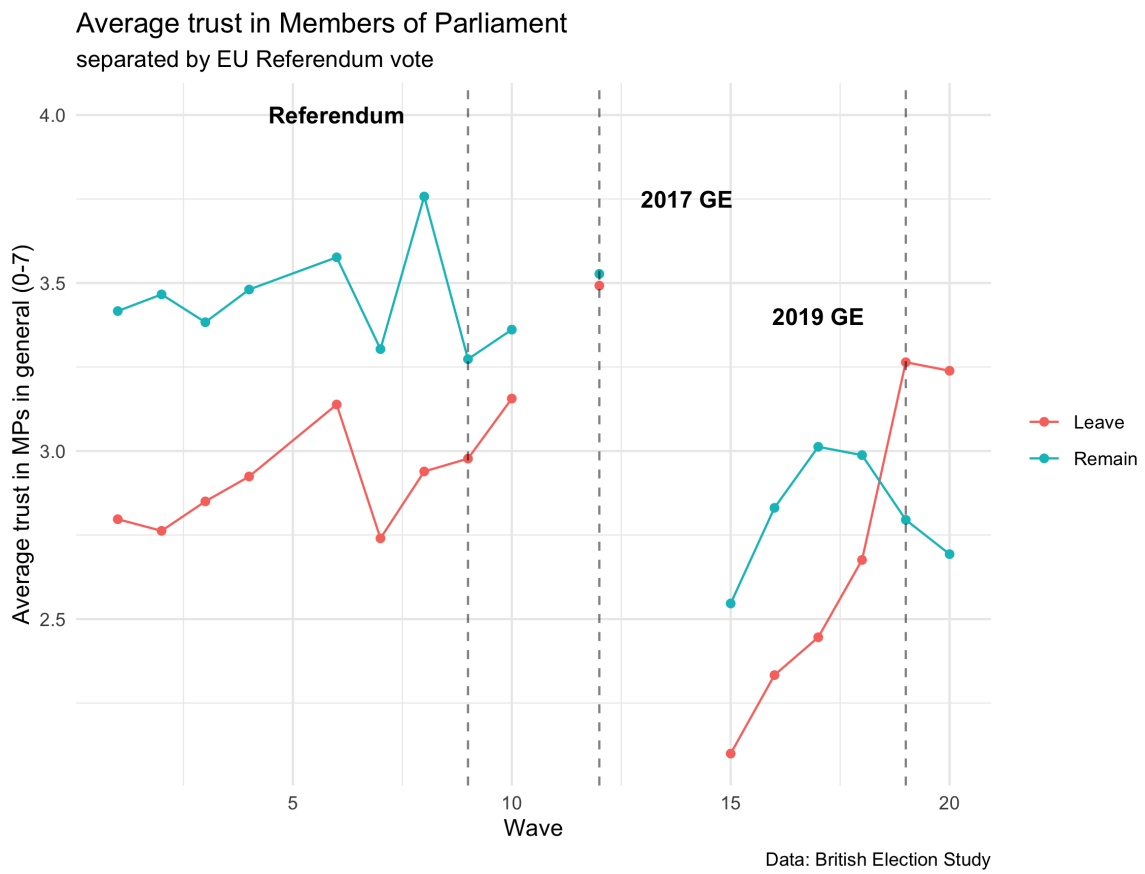


Figure 10:
Impact of Brexit on political trust